PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

TBD

Mr. John Ashley
Mill Manager
Weyerhaeuser NR Company
1785 Weyerhaeuser Road
Vanceboro, North Carolina 28586

SUBJECT: Air Quality Permit No. 02590T51
Facility ID: 25000104
Weyerhaeuser NR Company - New Bern/Vanceboro Facility
Vanceboro, Craven County, North Carolina
Fee Class: Title V
PSD Class: Major

Dear Mr. Ashley:

In accordance with your completed Air Quality Permit Application for a significant modification of a Title V permit, received August 3, 2015, we are forwarding herewith Air Quality Permit No. 02590T51 to Weyerhaeuser NR Company, New Bern Facility, 1785 Weyerhaeuser Road, Vanceboro, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

This emission source CTO Reactor System (ID No. ES 500-001) is listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final June 4, 2016. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 02Q .0515(f).

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal

adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

For PSD increment tracking purposes, this modification is not expected to consume or expand any increments.

This Air Quality Permit shall be effective from TBD until TBD, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or russell.braswell@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

c: Heather Ceron, EPA Region 4 (electronic copy only)
Washington Regional Office
Central Files
Connie Horne (cover letter only)

Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source I.D.	Emission Source Description
IES 140-003	Raw Water Clarifier No. 1
IES 140-008	Raw Water Clarifier No. 2
IES 140-400	Water Filtration Area Cooling Tower
IES 155-078	1st No. 6 Fuel Oil Tank
IES 150-090	Waste Oil Tank
IES 155-702	2nd No. 6 Fuel Oil Tank
IES 155-710	No. 6 Fuel Oil Tank (40,000 gallon)
IES 155-711	No. 2 Fuel Oil Tank (20,000 gallon)
ES 185-127-02	River Oxygen Diesel Tank
IES 354-052	Log Chipping/Screening
IIES 356-070	Import Chip Truck Dump
IES 356-108	Woodyard Fines Hopper
IES 356-112	Woodyard Screens
IES 356-122	Chip Silo No. 1
IES 356-124	Chip Silo No. 2
IES 356-130	Chip Conveyor to Pulp Mill
IES 356-144	Hog Fuel Pile
IES 356-238	Chip Silo No. 3
IES 356-315	Woodyard Overthick Slicers
IES 401-705	Turpentine Loading
IES 420-056	BMP Collection Tank
IES 425-090	No. 1 Bleached Stock HD Chest
IES 425-093	No. 2 Bleached Stock HD Chest
IES 425-305	No. 3 Bleached Stock HD Chest
IES 430-022	Sulfuric Acid Tank
IES 430-026	Sodium Chlorate Dissolving Tank
IES 430-029	Sodium Chlorate Day Tank
IES 430-217	Methanol Storage Tank No. 2 (North)
IES 430-224	Methanol Storage Tank No. 1 (South)
IES 440-001	No. 1 Weak Black Liquor Storage Tank
IES 440-004	No. 2 Weak Black Liquor Storage Tank
IES 440-016	Soap Skimmer Tank
IES 440-027	55% Black Liquor Storage Tank
IES 440-030	Soap Storage Tank No.1 (soap concentrator)
IES 440-032	Evaporator Boilout Tank (187)
IES 440-765	Soap Storage Tank No. 2 (soap storage)
IES 440-861	CRP Salt Cake Return Tank
IES 445-132	Black Liquor Dump Tank
IES 445-202	Demister Pad HCl Cleaning Chest 4th Floor
IES 455-006	Dregs Washer Tank
IES 455-021	Causticizer Sump
IES 455-822-02	500,000-gallon clarified white liquor storage tank
IES 455-028	No. 2 White Liquor Clarifier
IES 455-043	Lime Mud Storage Tank No. 1
IES 455-395	Ash Mix Tank (4,700 gallon)

Emission Source I.D.	Emission Source Description
IES 455-400	Green Liquor Stabilization Tank
IES 455-407	Slaker Classifier
IES 455-422	Lime Mud Mix Tank
IES 455-732	Lime Mud Storage Tank No. 2
IES 455-710	White Liquor Storage Tank
IES 455-711	White Liquor Standpipe
IRB2-FOT	No. 2 fuel oil tank
IES T-101	Sulfuric Acid Storage Tank (5,000 gallon)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.

2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.

3. For additional information regarding the applicability of GACT see the DAQ page titled “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows: http://daq.state.nc.us/permits/insig/

Summary of Changes to Permit

The following changes were made to the Weyerhaeuser NR Company's Air Quality Permit No. 02590T50:

Page(s)*	Section*	Description of Change(s)
Throughout	Throughout	• Updated permit/application numbers. • Updated dates. • Fixed formatting errors. • Removed references to CAIR requirements because this rule has expired.
3	Permitted Emission Source List	• Added biofuel to list of fuels for ES 161-001
	2.1.B.	• Added references to biofuel.
	2.2.C.	• Removed all requirements from this section.
	2.2.E.	• Added note that biofuel is to be included in the annual amount of residual fuel oil burned.

* This refers to the current permit unless otherwise stated.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
02590T51	02590T50	TBD	December 31, 2016

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Weyerhaeuser NR Company - New Bern/Vanceboro Facility**
Facility ID: **2500104**

Facility Site Location: **1785 Weyerhaeuser Road**
City, County, State, Zip: **Vanceboro, Craven County, NC 28586**

Mailing Address: **1785 Weyerhaeuser Road**
City, State, Zip: **Vanceboro, North Carolina 28586**

Application Number: **2500104.15B**
Complete Application Date: **August 3, 2015**

Primary SIC Code: **2611**
Division of Air Quality, Regional Office Address: **Washington Regional Office**
943 Washington Square Mall
Washington, North Carolina 27889

Permit issued this the TBD.

_____
William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table Of Contents

SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Power Area				
	ES 150-001 **Case-By-Case MACT**	No. 1 Power Boiler – No. 2/No. 4/No. 6 Fuel Oil/Natural Gas-Fired (579 million Btu/hour nominal maximum heat input)	NA	NA
	ES 161-001 **NSPS Subpart Db** **MACT Subpart S Control Device** **Case-By-Case MACT**	No. 2 Power Boiler - No. 2, 4 and No. 6 Fuel Oil/Propane/Natural Gas/LVHC gases/HVLC gases/SOGs/biofuel****-Fired (287 million Btu per hour maximum heat input rate from by-product gas, natural gas, propane and fuel oil/267 million Btu per hour maximum heat input rate from oil only)	CD 161-018 CD 161-024	Caustic scrubber (400 gallons per minute nominal liquid injection rate) Chevron-type mist eliminator
	ES 160-TMP **Case-By-Case MACT**	Temporary Boiler - No. 2 Fuel Oil-Fired (greater than 30 million Btu/hour and less than 100 million Btu hour nominal maximum heat input)	NA	NA
+	ES 155-999	Power Area Fugitive Sources	NA	NA
Foul Condensate Handling System				
	ES 161-078 **NSPS Subpart BB** **MACT Subpart S**	Steam Stripper (SOG)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via LVHC (SOG) NCG Collection System
	ES 401-007 **MACT Subpart S**	Stripper Feed Tank No. 1 (LVHC source)	ES 161-001 or ES 445-001 or ES 455-061 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System or No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System or Lime Kiln via LVHC collection system
	ES 401-013 **MACT Subpart S**	Stripper Feed Tank No. 2 (LVHC source)		
	ES 161-484 **MACT Subpart S**	LVHC Foul Gas Collection System Cooler		
	ES 402-722 ES 402-943 **MACT Subpart S**	HVLC Foul Gas Collection System Cooler HVLC Gas Collection System Cooler		

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Waste Water Treatment and IC Engines				
* *	ES 185-000 ES 185-010	Wastewater Treatment System	NA	NA
	ES 185-127 **MACT Subpart ZZZZ**	River Oxygen Diesel-fired Motor (400 hp)	NA	NA
	ES 185-118** **MACT Subpart ZZZZ** **NSPS Subpart IIII**	Leachate Canal Diesel-fired Pump Engine (70 hp)	NA	NA
	ES 100-004** **MACT Subpart ZZZZ** **NSPS Subpart IIII**	Diesel-fired Fire Water Pump Engine (305 hp)	NA	NA
	ES 101-104 **MACT Subpart ZZZZ**	Administrative Building Diesel-fired Emergency Generator (438 hp)	NA	NA
	ES 455-062 **MACT Subpart ZZZZ**	Lime Kiln Diesel-fired Emergency Motor (54 hp)	NA	NA
Wood Yard				
+	ES 354-044	Log Debarking	NA	NA
+	ES 356-999	Pine Wood Chip Piles	NA	NA
Turpentine Recovery				
	ES 401-704 **MACT Subpart S**	Turpentine Decanter	ES 161-001 or ES 445-001 or ES 455-061	No. 2 Power Boiler via LVHC/HVLC NCG Collection System or Recovery Boiler via LVHC/HVLC NCG Collection System or Lime Kiln via LVHC NCG Collection System
	ES 401-709 **MACT Subpart S**	Underflow Decanter		
	ES 402-211 **NSPS Subpart BB** **MACT Subpart S**	Primary Condenser		
	ES 402-220 **NSPS Subpart BB** **MACT Subpart S**	Secondary Condenser		
	ES 401-071-02 **MACT Subpart S**	Turpentine Storage Tank		
*	ES 401-076	Turpentine Sump	NA	NA
Digester Area				
	ES 402-119 **NSPS Subpart BB** **MACT Subpart S**	Chip Bin (HVLC source)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC/LVHC NCG Collection System
	ES 402-141 **NSPS Subpart BB** **MACT Subpart S**	Continuous Digester (LVHC source)		
	ES 402-179 **NSPS Subpart BB** **MACT Subpart S**	Blow Tank (HVLC source)		

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	ES 402-190 **NSPS Subpart BB** **MACT Subpart S**	Filtrate Wash Liquor Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
	ES 402-150 **NSPS Subpart BB** **MACT Subpart S**	Primary Flash Tank		
	ES 402-151 **NSPS Subpart BB** **MACT Subpart S**	Secondary Flash Tank		
Washing and Screening				
	ES 420-006 **NSPS Subpart BB** **MACT Subpart S**	Filtrate Storage Tank No. 1	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
	ES 420-008 **NSPS Subpart BB** **MACT Subpart S**	Filtrate Storage Tank No. 2		
	ES 420-025 **MACT Subpart S**	Foam Tank		
	ES 420-010 **MACT Subpart S**	Brownstock Washer System		
	ES 420-044 **MACT Subpart S**	Brown Stock Decker		
	ES 420-123	Primary Rejects Tank (190)	NA	NA
	ES 420-140	Secondary Rejects Tank (192)	NA	NA
	ES 420-332 **MACT Subpart S**	Brown Decker Filtrate Tank (189)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
*	ES 420-029	Washed Stock Chest (9)	NA	NA
	ES 420-325 **MACT Subpart S**	Brown Stock Washed HD Chest (3)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
Oxygen Delignification Area				
*	ES 420-052	200 Ton Brownstock HD Chest (38)	NA	NA
	ES 420-229 **MACT Subpart S**	Oxygen Blow Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
	ES 420-235 **MACT Subpart S**	No. 1 Press Washer		
	ES 420-259 **MACT Subpart S**	No. 1 Press Washer Level Tank		
	ES 420-261 **MACT Subpart S**	No. 1 Press Washer Filtrate Tank (12)		

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	ES 420-274 **MACT Subpart S**	Oxygen Interstage Pulp Tank	NA	NA
	ES 420-280 **MACT Subpart S under AOS1**	No. 2 Press Washer	AOS 1: ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System during AOS 1 when No. 1 wash press is out of service.
	ES 420-302 **MACT Subpart S under AOS1**	No. 2 Press Washer Level Tank		
	ES 420-306 **MACT Subpart S under AOS1**	No. 2 Press Washer Filtrate Tank		
*	ES 420-202	White Liquor Oxidizer	CD 420-207	Dual Chevron-type Mist Eliminators
Bleach Plant Area				
	ES 425-005	Acid Sewer Vent Tower (46)	CD 425-101	Bleach Plant Fluidized Bed Wet Scrubber (660 gallons per minute nominal white liquor recirculation rate)
	ES 425-047 **MACT Subpart S**	D1 Stage Tower		
	ES 425-054 **MACT Subpart S**	D1 Stage ClO2 Seal Box		
	ES 425-052 **MACT Subpart S**	D1 Stage Bleach Washer		
	ES 425-076 **MACT Subpart S**	D2 Stage Tower	CD 425-101	Bleach Plant Fluidized Bed Wet Scrubber (660 gallons per minute nominal white liquor recirculation rate)
	ES 425-083 **MACT Subpart S**	D2 Stage ClO2 Seal Box		
	ES 425-081 **MACT Subpart S**	D2 Stage Bleach Washer		
	ES 425-032 **MACT Subpart S**	Pre-Bleach Tower	NA	NA
	ES 425-036 **MACT Subpart S**	Pre-Bleach Washer		
	ES 425-038 **MACT Subpart S**	Pre-Bleach Seal Tank		
*	ES 425-060	Eop Stage Tower		
*	ES 425-065	Eop Stage Bleach Washer		
*	ES 425-067	Eop Stage Seal Box		
*	ES 425-117, ES 425-118 **MACT Subpart S**	Nos. 1 and 2 Bleached Deckers		
*	ES 425-714	No. 3 Bleached Decker		
Bleached Chemical Preparation Area				
*	ES 430-047	East Chlorine Dioxide Storage Tank (79,489 gallons)	CD 430-531	Packed Tower Type Wet Scrubber (100 gallon per minute nominal chilled water injection rate)
*	ES 430-542	Chlorine Dioxide Generator System		
*	ES 430-543	West Chlorine Dioxide Storage Tank (112,000 gallons)		

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Evaporator Area				
	ES 440-008 **NSPS Subpart BB** **MACT Subpart S**	Evaporator/Concentrator Hotwell System	ES 161-001 or ES 455-061	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System or Lime Kiln via LVHC NCG Collection System
	ES 440-713 **NSPS Subpart BB** **MACT Subpart S**	No. 1 Pre-Evaporator	ES 161-001 or ES 455-061	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System or Lime Kiln via LVHC NCG Collection System
	ES 440-719 **NSPS Subpart BB** **MACT Subpart S**	No. 2 Pre-Evaporator		
	ES 440-720 **NSPS Subpart BB** **MACT Subpart S**	No. 3 Pre-Evaporator		
	ES 440-016 **NSPS Subpart BB** **MACT Subpart S**	1A Effect Evaporator	ES 161-001 or ES 445-001 or ES 455-061	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System or Lime Kiln via LVHC NCG Collection System
	ES 440-015 **NSPS Subpart BB** **MACT Subpart S**	1B Effect Evaporator		
	ES 440-014 **NSPS Subpart BB** **MACT Subpart S**	Second Effect Evaporator		
	ES 440-013 **NSPS Subpart BB** **MACT Subpart S**	Third Effect Evaporator		
	ES 440-012 **NSPS Subpart BB** **MACT Subpart S**	Fourth Effect Evaporator		
	ES 440-011 **NSPS Subpart BB** **MACT Subpart S**	Fifth Effect Evaporator		
	ES 440-009 **NSPS Subpart BB** **MACT Subpart S**	Sixth Effect Evaporator		
	ES 440-400 **NSPS Subpart BB** **MACT Subpart S**	C-1 Black Liquor Concentrator		
	ES 440-401 **NSPS Subpart BB** **MACT Subpart S**	C-2 Black Liquor Concentrator		
	ES 440-850 **NSPS Subpart BB** **MACT Subpart S**	HSC 1 Concentrator		
	ES 440-852 **NSPS Subpart BB** **MACT Subpart S**	HSC 2 Concentrator		
*	ES 440-865	80% Black Liquor Storage Tank	NA	NA

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Chemical Recovery				
	ES 445-001 **MACT Subpart MM** **NSPS Subpart BB** **MACT Subpart S** **Control Device** **BACT**	Recovery Boiler (New Design) - Black Liquor Solids/HVLC Gases/LVHC/SOG/Natural Gas/No. 2, No. 4, and No. 6 Fuel Oil-Fired (4.5 million lbs of Black Liquor Solids /day nominal maximum firing rate)	CD 445-340 and CD 445-369 (IDs for each chamber)	Dry Bottom, two-chamber electrostatic precipitator - 201,960 square feet of collection plate area
	ES 445-121 **MACT Subpart MM** NSPS Subpart BB	Smelt Dissolving Tank	CD 445-370 and ES 445-001	Wet Scrubber (735 gallons per minute nominal injection rate) and Recovery Boiler
Lignin Removal Process				
	ES 470-001	Lignin Solids Removal System Pilot Plant (1,000 oven dried ton (ODT) per year)	CD-470-009	NCG Caustic Scrubber Spray Tower
	ES 470-002	Lignin Solids Handling Process System	NA	NA
Causticizing Area				
*	ES 455-003	No. 1 Green Liquor Clarifier (134)	NA	NA
*	ES 455-403	No. 2 Green Liquor Clarifier (135)	NA	NA
*	ES 455-015	No. 1 Causticizer	NA	NA
*	ES 455-017	No. 2 Causticizer	NA	NA
*	ES 455-019	No. 3 Causticizer	NA	NA
*	ES 455-020	No. 4 Causticizer	NA	NA
*	ES 455-410	No. 5 Causticizer	NA	NA
	ES 455-061 **NSPS Subpart BB** **MACT Subpart S** **Control Device** **MACT Subpart MM**	Lime Kiln – Residual Fuel Oil/ Natural Gas /LVHC Gases-Fired (118 million Btu per hour nominal maximum heat input rate)	CD 455-433	Single-chamber, three-field, high-voltage, negative-corona electrostatic precipitator (30,222 square feet of collection plate area)
*	ES 455-036	Mud Washer/Weak Wash Tank	NA	NA
*	ES 455-058	Lime Mud Filter Vacuum Pump	NA	NA
*	ES 455-059	Lime Conveyor Transfer Points (Hot Lime Pan Conveyor)	CD 455-754-00 CD 455-751-00	Bagfilter (1,885 square feet of filter area) in series with a simple cyclone (39.6 inches in diameter)
*	ES 455-073-08	Hot Lime Pan Conveyor		
*	ES 455-072-00	Hot Lime Crusher		
*	ES 455-074-08	Hot Lime Bucket Elevator		
*	ES 455-075-02	Hot Lime Bin		
*	ES 455-749-02	Fresh Lime Bin		
*	ES 455-079	Lime Mud Filter	NA	NA

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	ES 455-406	Lime Slaker	CD 455-408	Spray chamber wet scrubber (50 gallons per minute nominal injection rate)
+	ES 455-999	Bucket Conveyor Fugitive Sources	NA	NA
Pulp Machine Area				
	ES 465-001	Pulp Dryer Operation	NA	NA
Tall Oil Production				
#	ES 500-001***	CTO Reactor System	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System

This source has no applicable requirements under the North Carolina SIP, but has potential VOC emissions greater than the threshold under 15A NCAC 02Q .0503(8).

* No applicable requirements except toxics.

** These emission sources (ID Nos. ES 185-118 and ES 100-004) are listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final 60 days from issuance date of Air Permit No. 02590T49. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 02Q .0515(f).

*** This emission source (ID No. ES 500-001) is listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final 60 days after issue date of Air Permit No. 02590T50. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 02Q .0515(f).

**** Biofuel is derived from rendered animal fat.

+ Subject to 15A NCAC 02D .0540 “Particulates from Fugitive Dust Emission Sources”

Note: The installation of turbine generator (38.1 MW) [associated with Power Boilers 1 and 2 and Recovery Boiler] is listed as a 15A NCAC 02Q .0501(c)(2) modification. The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 02Q .0504 on or before 12 months after commencing operation of this turbine generator in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. No. 1 Power Boiler (ID No. ES 150-001) – No. 2/No. 4/No. 6 fuel oil/Natural gas-fired (579 mmBtu per hour nominal maximum heat input), Uncontrolled

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	0.195 pounds per million Btu heat input	15A NCAC 02D .0503(c)
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Nitrogen Oxides	0.8 pounds per million Btu heat input while firing oil or natural gas	15A NCAC 02D .0519
Visible Emissions	40 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 90 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 02D .0521
Particulate Matter (TSP)	Less than 98 tons per consecutive twelve month period	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Particulate Matter (PM10)	Less than 82 tons per consecutive twelve month period	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Sulfur Dioxide	Less than 1,440 tons per consecutive twelve month period	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Nitrogen Oxides	Less than 240 tons per consecutive twelve month period	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Regulated NSR Pollutants	See Permit Condition 2.2 D	15A NCAC 02D .0530(u)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	112(j) Case-by-Case MACT See Permit Condition 2.2 E	15A NCAC 02D .1109

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of fuel oil that are discharged from this source into the atmosphere shall not exceed 0.195 pounds per million Btu heat input. [15A NCAC 02D .0503(c)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

c. No testing shall be required for the combustion of natural gas or No. 2 fuel oil in this source. Under the provisions of NCGS 143-215.108, if the combustion of residual fuel oil makes up more than 10 percent of the annual heat input for this source, the Permittee shall demonstrate compliance with the emission limits above by testing the No. 1 Power Boiler (ID Nos. ES 150-001) for particulate matter in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. The testing shall be performed annually, if residual fuel oil makes up more than 10 percent of the annual heat input during the calendar year. If the results of the testing demonstrate

results at less than 80 percent of the limit above, the testing frequency may be reduced to once per five years. If the results of this or any test is above the limit given in Section 2.1 A. 1. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503."

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

d. No Monitoring/Recordkeeping/reporting is required from the firing of Natural Gas, No.2, No. 4 or No. 6 fuel oil in this source for this regulation.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The maximum sulfur content of any No. 2, No. 4, or 6 fuel oil received and burned in the boiler shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the fuel oil exceeds this limit.

d. To assure compliance, the Permittee shall monitor the sulfur content of the fuel oil by using fuel oil supplier certification per month. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a semiannual basis and include the following information:
   i. the name of the fuel oil supplier;
   ii. the maximum sulfur content of the fuel oil received during the period;
   iii. the method used to determine the maximum sulfur content of the fuel oil; and
   iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the fuel oil fired during the period.

e. No Monitoring/Recordkeeping/reporting is required from the firing of Natural Gas in this source for this regulation.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the oil is not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a summary report of the fuel oil supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0519: CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS

a. Emissions of nitrogen oxides shall not exceed 0.8 pounds per million Btu of heat input from any oil or gas-fired boiler with a capacity of 250 million Btu per hour or more. [15A NCAC 02D .0519(b)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No Monitoring/Recordkeeping/reporting is required from the firing of Natural Gas, No.2, No. 4 or No. 6 fuel oil in this source for this regulation.

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the boiler (**ID No. ES 150-001**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. [15A NCAC 02D .0521 (c)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 4. a. (ID No. ES 150-001) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a day the Permittee shall observe the emission points of this source for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If the emission source(s) is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. The Permittee shall establish normal for the source in the first 30 days following the effective date of Permit 02590T43. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.4. a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, the boiler (ID Nos. ES 150-001) shall discharge into the atmosphere less than the following per consecutive twelve month period:

Pollutant	Emission Limit
Particulate Matter (TSP) [Front Half Only]	98 tons per consecutive twelve month period.
Particulate Matter (PM10) [Front Half Only]	82 tons per consecutive twelve month period.
Sulfur Dioxide	1,440 tons per consecutive twelve month period.
Nitrogen Oxides	240 tons per consecutive twelve month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A. 5. a. (ID No. ES 150-001) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/ Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure compliance, the Permittee shall maintain records of the emissions of TSP, PM10, SO2, and NOx from No. 1 Power Boiler (ID No. ES 150-001) during each month. Emissions shall be calculated using the amount of gas and/or fuel oil fired during the month and the emission factor from the most recent DAQ-approved stack test or AP-42. The record of the emissions for each month shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the emissions for each month are not recorded.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities within 30 days after each calendar year half, due and postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:
   i. the monthly emissions of TSP, PM10, SO2, and NOx from the No. 1 Power Boiler (ID No. ES 150-001) for the previous 17 months. The total emissions of TSP, PM10, SO2, and NOx from the No. 1 Power Boiler must be calculated for each of the 12-month periods over the previous 17 months; and
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

B. No. 2 Power Boiler (ID No. ES 161-001) – No. 2/4/No. 6 fuel oil/Propane/Natural Gas/LVHC gases/HVLC gases/SOG/biofuel-fired (287 million Btu/hour nominal maximum heat input from by-product gas and oil/267 million Btu/hour nominal maximum heat input from oil only), Controlled by a Caustic Scrubber (ID No. CD-161-018) and a Chevron-type Mist Eliminator (ID No. CD-161-024)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	0.180 pounds per million Btu heat input	15A NCAC 02D .0503
Particulate Matter	0.10 pounds per million Btu heat input	15A NCAC 02D .0524 (40 CFR Part 60 Subpart Db)
Sulfur Dioxide	0.8 pounds per million Btu heat input and 90 percent minimum sulfur dioxide removal efficiency	15A NCAC 02D .0524 (40 CFR Part 60 Subpart Db)
Nitrogen Oxides	$E_n = (0.1H_{go} + 0.3H_{ro})/ (H_{go} + H_{ro})$ Where: E_n = nitrogen oxide emission limit (lb/million Btu) H_{go}= heat input from the combustion of distillate oil, propane, and natural gas (million Btu) H_{ro}= heat input from the combustion of residual oil (million Btu) Or $E_n = 0.5$ Where: E_n = nitrogen oxide emission limit (lb/million Btu) when fossil fuel and by-product waste are combusted simultaneously.	15A NCAC 02D .0524 (40 CFR 60, Subpart Db)
Visible Emissions	20 percent opacity	15A NCAC 02D .0524 (40 CFR 60, Subpart Db)
Regulated NSR Pollutants	See Permit Condition 2.2 D	15A NCAC 02D .0530(u)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	112(j) Case-by-Case MACT See Permit Condition 2.2 E	15A NCAC 02D .1109

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of fuel oil that are discharged from this source into the atmosphere shall not exceed 0.180 pounds per million Btu heat input. [15A NCAC 02D .0503(c)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No Monitoring/Recordkeeping/reporting is required from the firing of No.2/No. 4/No. 6 fuel oil /Natural Gas /LVHC gases/HVLC gases/SOG/biofuel in this source (ID No. ES 446-014) for this regulation.

2. 15A NCAC 02D .0524: NSPS 40 CFR 60 SUBPART Db

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting,

recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Db, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

b. **Particulate matter** - Particulate emissions from this boiler shall not exceed 0.10 pounds per million Btu heat input. [40 CFR Part 60, Subpart 60.43b]

c. **Sulfur dioxide –** Sulfur dioxide emissions from this boiler shall not exceed 0.8 pounds per million Btu heat input and the potential SO2 emissions shall be reduced by minimum of 90 percent by the scrubber. [40 CFR Part 60, Subpart 60.42b]

d. **Nitrogen oxides -**
   i. Nitrogen oxide emissions when solely firing distillate oil and/or propane/or Natural Gas shall not exceed 0.1 pounds per million Btu heat input. [40 CFR Part 60, Subpart 60.49b(x)(1)(i)]
   ii. Nitrogen oxide emissions when solely firing residual oil shall not exceed 0.3 pounds per million Btu heat input. [40 CFR Part 60, Subpart 60.49b(x)(1)(i)]
   iii. Nitrogen oxide emissions from the simultaneous combustion of a mixture of distillate fuel oil and residual fuel oil shall not be in excess of the rate calculated by the following formula [40 CFR Part 60, Subpart 60.44b]:

   $$\mathbf{E_n = (0.1H_{go} + 0.3H_{ro})/ (H_{go} + H_{ro})}$$

   Where: E_n = nitrogen oxide emission limit (lb/million Btu)
   H_{fo} = heat input from the combustion of distillate oil and propane (million Btu)
   H_{ro} = heat input from the combustion of residual oil (million Btu)

   iv. Nitrogen oxide emissions from the simultaneous combustion of a mixture of distillate fuel oil, propane, residual fuel oil, or Natural Gas and/or byproduct gas shall not exceed 0.5 pounds per million Btu heat input. [40 CFR Part 60, Subpart 60.49b(x)(1)(ii)]

   v. Compliance with the nitrogen oxide emission limits are determined on a 30-day rolling average basis [40 CFR Part 60, Subpart 60.44b(i)].

e. **Opacity** - Each boiler shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

f. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 2. b. through d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

g. 40 CFR § 60.47b(a) - The Permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring sulfur dioxide concentrations and either oxygen or carbon dioxide concentrations at the inlet and outlet of the scrubber.
h. 40 CFR § 60.47b(c) – sulfur dioxide minimum emission data requirements
i. 40 CFR § 60.47b(d) – measurement of sulfur dioxide 1-hour averages
j. 40 CFR § 60.47b(e) – installation, evaluation, and operation of continuous monitoring systems
k. 40 CFR § 60.48b(a) – Due to the presence of uncombined water vapor, in lieu of a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere, the opacity shall be monitored using the following surrogate parameters:
   i. stack gas temperature after the scrubber (degrees F); and
   ii flowrate of recirculating scrubber reagent (gallons per minute).

   The stack gas temperature shall be maintained below 150 degrees F (3 hour average). The recirculating

scrubber reagent flowrate shall be maintained above 400 gpm (3 hour average). The Permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring surrogate parameters detailed above. If the Permittee fails to maintain the parameters as specified above, the Permittee shall be deemed in noncompliance with 02D .0524.

l. 40 CFR § 60.48b(b) - The Permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxide emissions discharged to the atmosphere and record the output of the system.
m. 40 CFR § 60.48b(c) - operation of nitrogen oxide continuous monitoring systems and data recording.
n. 40 CFR § 60.48b(d) - measurement of nitrogen oxide 1-hour averages.
o. 40 CFR § 60.48b(e) - installation, evaluation, and operation of continuous monitoring systems.
p. 40 CFR § 60.48b(f) - continuous monitoring systems breakdowns, repairs, calibration checks and zero and span adjustments.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the emissions are not monitored as described above.

Recordkeeping and Reporting [15A NCAC 02Q .0508(f)]

q. 40 CFR § 60.49b(d) - recordkeeping of the amounts of each fuel fired each day.
r. 40 CFR § 60.49b(f) - recordkeeping of the opacity shall be performed utilizing the surrogate monitoring parameters as detailed per Section 2.1 B. 3. k. above.
s. 40 CFR § 60.49b(g) and (i) - daily recordkeeping and reporting of the nitrogen oxide emission rates and supporting data.
t. 40 CFR § 60.49b(h) - reporting of excess emissions.
u. 40 CFR § 60.49b(j), (k), and (m) - daily recordkeeping and reporting of the sulfur dioxide emission rates and supporting data.
v. 40 CFR § 60.49b(o) – records retention [note: General Condition O in Part I Section 3 also applies].
w. The Permittee shall submit a summary report of the monitoring and recordkeeping activities, acceptable to the Regional Air Quality Supervisor, within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained as described above.

C. Temporary Boiler (ID No. ES 160-TMP) – No. 2 fuel oil-fired (greater than 30 mmBtu per hour and less than 100 mmBtu per hour heat input), Uncontrolled

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	$E = 1.090(Q)^{-.2594}$ Where E = allowable emission rate in pounds per million Btu Q = Facility total 02D .0503-subject maximum heat input in million Btu per hour	15A NCAC 02D .0503
Sulfur Dioxide	2.3 lb/MMBtu	15A NCAC 02D .0516
Visible Emissions	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 02D .0521
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Sulfur Dioxide	Less than 40 tons per consecutive twelve month period.	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Hazardous Air Pollutants	No temporary, back-up boiler shall remain on-site for more than 180 consecutive days	15A NCAC 02Q .0317 (15A NCAC 02D .1109 Avoidance)

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of fuel oil that are discharged from this source into the atmosphere shall not exceed the allowable limit pursuant to 15A NCAC 02D .0503. The actual emission limit shall be determined by the specific heat input rating added to the total facility 02D .0503-subject heat input in million Btu per hour and the equation:

$E = 1.090(Q)^{-.2594}$

Where

E = allowable emission rate in pounds per million Btu
Q = Facility total 02D .0503-subject maximum heat input in million Btu per hour

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of No. 2 fuel oil in this source for this regulation.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the source (ID Nos. ES-160-TMP) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions when No. 2 fuel oil is burned in the source (ID Nos. ES-160-TMP).

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02D .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for the combustion of No. 2 fuel oil in the source.

4. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Dc Avoidance

a. In order to avoid the applicability of 15A NCAC 02D .0524, the boiler (ID No. ES-160-TMP) shall combust distillate oil with a potential SO_2 emission rate no greater than 0.060 lb/MMBtu, be capable of being moved from one location to another, and remain onsite for no longer than 180 consecutive days as defined in 40 CFR § 60.41c. The Permittee shall notify the Regional Office in writing within 10 days of exceeding the 180 day period.

5. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, the temporary boiler (ID Nos. ES 160-TMP) shall discharge into the atmosphere less 40 tons of sulfur dioxide per consecutive twelve month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 C. 5. a. (ID Nos. ES 160-TMP) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/ Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure that emissions are less than the above-specified limits, the Permittee shall not burn more than 1,125,000 gallons of No. 2 fuel oil in the boiler (ID Nos. ES 160-TMP) per consecutive twelve (12) month period.). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of fuel burned exceeds this limit.

d. To ensure compliance, the Permittee shall maintain records as follows
   i. the Permittee shall record and maintain records of the amounts (in gallons) of No. 2 fuel oil burned in the boiler (ID Nos. ES 160-TMP) during each month.

   The record of the amounts of fuel (in gallons) burned during each month shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of fuel burned during each month are not recorded.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities within 30 days after each calendar year half, due and postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:
   i. the monthly quantities of fuel oil burned in the boiler (**ID Nos. ES 160-TMP**) for the previous 17 months. The total quantities burned must be calculated for each of the 12-month periods over the previous 17 months; and
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 1109: 112(j) CASE-BY-CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. No temporary, back-up, boiler (ID No. ES-160-TMP) shall be retained on-site for 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period. If any temporary boiler remains on-site for greater than 180 consecutive days, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

b. The Permittee shall maintain records of the dates that any temporary boiler is installed on-site and the dates that any temporary boilers are removed from the plant site. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records of are not created and retained as required above.

Notifications and Reports [15A NCAC 02Q .0508(f)]

c. Initial Notification. Within 15 days of installing any temporary, back-up boiler at the facility, the Permittee shall submit a written notification to the Regional Supervisor, DAQ. The notification shall indicate that actual date of the boiler installation, or where the notification is provided prior to such date, the anticipated date of boiler installation.

D. Foul Condensate Handling System consisting of:

Foul Condensate Steam Stripper (ID No. ES 161-078) generating stripper off gases (SOGs);
Stripper Feed Tanks No 1. and No 2. (ID Nos. ES 401-007 and 401-013);
LVHC Foul Gas Collection System Cooler (ID No. ES 161-484);
HVLC Foul Gas Collection System Cooler (ID No. ES 402-722); and
HVLC Gas Collection System Cooler (ID No. ES 402-943)

Controlled by either the No. 2 Power Boiler (ID No. ES 161-001) or the Recovery Boiler (ES No. 445-001), or the Lime Kiln (ID No. ES 455-061):

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	**Affected Source:** **ID No. ES 161-078** 5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)

1. 15A NCAC 02D .0524: NSPS 40 CFR 60 SUBPART BB

a. For the emission source (ID No ES 161-078), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. No owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR Part 60, Subpart 60.283(a)(1)]:
   i. The gases are combusted in a lime kiln subject to the provisions of 60.283(a)(5); or
   ii. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1200 °F) for at least 0.5 second

Monitoring [15A NCAC 02Q .0508(f)]

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to insure that the stripper (ID No. ES 161-078) emissions are routed to the No. 2 Power Boiler (ID No. ES 161-001), Recovery Boiler (ES No. 445-001), or Lime Kiln (455-061) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained.

Reporting/ Recordkeeping [15A NCAC 02Q .0508(f)]

d. 40 CFR § 60.284(d) –reporting of excess emissions.

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. River Oxygen Diesel-fired Motor (ID Nos. 185-127), Uncontrolled Lime Kiln Diesel-fired Emergency Motor (ID No. ES 455-062) Administrative Building Diesel-fired Emergency Generator (ID No. ES 101-104)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.	15A NCAC 02D .0521
Nitrogen Oxides	Less than 40 tons per consecutive twelve month period total for the River Oxygen Diesel Motor (ID No. 185-127).	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	Compliance required by May 3, 2013.	15A NCAC 02D .1111 (40 CFR Part 63 Subpart ZZZZ)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission point of the River Oxygen Diesel Motor (ID No. 185-127) for any visible emissions above normal. If the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. The Permittee shall establish normal for the source in the first 30 days following the effective date of Permit 02590T43. If visible emissions from this source is observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission point of the emission source in accordance with

15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E. 2. a. above.

iii. No monitoring or recordkeeping is required for Lime Kiln Emergency Motor (ES 455-062) or Administrative Building Emergency Generator (ES 101-104).

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, the river oxygen motors (ID No. 185-127) combined, shall discharge into the atmosphere less than 40 tons of nitrogen dioxide per consecutive twelve month period:

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 E. 3. a. (ID No. 185-127) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/ Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure that emissions are less than the above-specified limits, the Permittee shall not burn more than 170,000 gallons of diesel fuel in the motors (ID No. 185-127) combined, per consecutive twelve (12) month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of fuel burned exceeds this limit.

d. To ensure compliance, the Permittee shall maintain records as follows
   i. the Permittee shall record and maintain records of the amounts (in gallons) of diesel fuel oil burned in the motors (ID No. 185-127) during each month and;

   The record of the amounts of fuel (in gallons) burned during each month shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of fuel burned during each month are not recorded.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities and postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:
   i. The monthly quantities of diesel fuel oil burned in the motors (ID No. 187-127) for the previous 17 months. The total quantities burned must be calculated for each of the 12-month periods over the previous 17 months; and
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .1111: MACT 40 CFR 63 Subpart ZZZZ

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart ZZZZ, including Subpart A "General Provisions," by May 3, 2013.

Emission Limitations [40 CFR 63.6602, Table 2c]

b. The Permittee must comply with the following requirements:
   i. change oil and filter every 500 hours of operation or annually, whichever comes first;
   ii. inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
   iii. inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

c. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Monitoring, Installation, Collection, Operation and Maintenance Requirements [40 CFR 63.6625(e), (f), (h), (i) or (j)]

d. The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR § 63.6625(e)]

e. The Permittee must install a non-resettable hour meter if one is not already installed. [40 CFR § 63.6625(f)]

f. The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c MACT Subpart ZZZZ apply. [40 CFR § 63.6625(h) and Table 2c MACT Subpart ZZZZ]

g. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c of MACT Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of MACT Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR § 63.6625(i), 40 CFR § 63.6625(j), and Table 2c MACT Subpart ZZZZ]

h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Continuous Compliance [40 CFR 63.6605 and 63.6640]

i. The Permittee must operate the emergency stationary RICE according to the following requirements. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for less than 50 hours per year, as described in paragraphs (i - iii) below, is prohibited. If you do not operate the engine according to the requirements in paragraphs (i - iii) below, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
   i. There is no time limit on the use of emergency stationary RICE in emergency situations.
   ii. The Permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by DAQ, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition DAQ for approval of additional

hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that DAQ standards require maintenance and testing of emergency RICE beyond 100 hours per year.

iii. The Permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the Permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.
[40 CFR § 63.6640 (f)(1)(i) through (iii)]

j. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [40 CFR § 63.6655, except 40 CFR § 63.6655(c)]

k. The Permittee must keep the following records:
   i. A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
   ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) and monitoring equipment.
   iii. Records of all required maintenance performed on the monitoring equipment.
   iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.

l. The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and maintained according to the maintenance plan.

m. The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

Reporting Requirements [Table 2c (Footnote 1) to Subpart ZZZZ of 40 CFR 63, 15A NCAC 02Q .0508(f)]

o. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2c of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

p. The Permittee shall submit a summary report of monitoring and recordkeeping requirements postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of

deviations from the requirements of this permit shall be clearly identified.

q. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reports are not submitted.

F. Turpentine Recovery System components - the Primary Condenser (ID No. ES 402-211) and Secondary Condenser (ID No. ES 402-220); controlled by the LVHC NCG Collection System routed to either the No. 2 Power Boiler (ID No. ES 161-001) or the Recovery Boiler (ES No. 445-001), or the Lime Kiln (ID No. ES 455-061):

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Conditions 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)

1. 15A NCAC 02D .0524: NSPS 40 CFR 60 SUBPART BB

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. No owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR Part 60, Subpart 60.283(a)(1)]:
   i. The gases are combusted in a lime kiln subject to the provisions of 60.283(a)(5); or
   ii. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1200 °F) for at least 0.5 second

Monitoring [15A NCAC 02Q .0508(f)]

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to insure that the emissions are routed to either the Lime Kiln (ID No. ES455-061) or No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ES No. 445-001) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained.

Reporting/ Recordkeeping [15A NCAC 02Q .0508(f)]

d. 40 CFR § 60.284(d) –reporting of excess emissions.

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

G. The Digester System consisting of:

Chip Bin (ID No. ES 402-119),
Continuous Digester[1] (ID No. ES 402-141),
Blow Tank (ID No. ES 402-179),
Primary Flash Tank (ID No. ES 402-150),
Secondary Flash Tank (ID No. ES 402-151), and
Filtrate Wash Liquor Tank (ID No. ES 402-190), and;
The Filtrate Storage Tanks No. 1[2] and No 2[2] (ID Nos. ES 420-006[2] and 420-008[2]);
Controlled by the HVLC[1] NCG Collection System routed to either the No. 2 Power Boiler (ID No. ES 161-001) or the Recovery Boiler (ID No. ES 445-001):

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)

1. Per 40 CFR 63.441 the Continuous Digester is defined as part of the LVHC system.
2. These sources are part of the Washing and Screening Area but are included with the Digester System grouping due to shared NSPS control requirements.

1. 15A NCAC 02D .0524: NSPS 40 CFR 60 SUBPART BB

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. No owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR Part 60, Subpart 60.283(a)(1)]:
   i. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1200 °F) for at least 0.5 second.

Monitoring [15A NCAC 02Q .0508(f)]

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to insure that the emissions are routed to the No. 2 Power Boiler (ID No. ES 161-001) or the Recovery Boiler (ID No. ES 445-001) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained

Reporting/ Recordkeeping [15A NCAC 02Q .0508(f)]

d. 40 CFR § 60.284(d) –reporting of excess emissions.

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

H. The Evaporator Area consisting of:

No. 1 Pre-Evaporator (ID No. ES 440-713),
No. 2 Pre-Evaporator (ID No. ES 440-719),
No. 3 Pre-Evaporator (ID No. ES 440-720),
1A Effect Evaporator (ID No. ES 440-016),
1B Effect Evaporator (ID No. ES 440-015),
Second Effect Evaporator (ID No. ES 440-014),
Third Effect Evaporator (ID No. ES 440-013),
Fourth Effect Evaporator (ID No. ES 440-012),
Fifth Effect Evaporator (ID No. ES 440-011),
Sixth Effect Evaporator (ID No. ES 440-009),
C-1 and C-2 Black Liquor Concentrators (ID Nos. ES 440-400 and 440-401), and
Evaporator/Concentrator Hotwell System (ID No ES 440-008);

Controlled by the LVHC NCG Collection System routed to the No. 2 Power Boiler (ID No. ES 161-001) or the Recovery Boiler (ES No. 445-001) or the Lime Kiln (ID No. ES 455-061):

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)

1. 15A NCAC 02D .0524: NSPS 40 CFR 60 SUBPART BB

a. For the emission sources above, the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. For the emission sources above, no owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR Part 60, Subpart 60.283(a)(1)]:
   i. The gases are combusted in a lime kiln subject to the provisions of 60.283(a)(5); or
   ii. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1200 °F) for at least 0.5 second

Monitoring [15A NCAC 02Q .0508(f)]

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to insure that the emissions are routed to either the Lime Kiln (ID No. ES 455-061) or No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ES No. 445-001) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained.

Reporting/ Recordkeeping [15A NCAC 02Q .0508(f)]

d. 40 CFR § 60.284(d) –reporting of excess emissions.
e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

I. Recovery Boiler (New Design) (ID No. ES 445-001) – Black Liquor Solids/Natural Gas/HVLC Gases/LVHC Gases/SOG gases/No. 2/ No. 4 or No. 6 fuel oil-fired (4.5 million lbs BLS/day nominal maximum firing rate), Controlled by the Dry Bottom ESP (ID Nos. CD-455-340 and CD-455-369)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	3.0 pounds per equivalent tons of air dried pulp	15A NCAC 02D .0508
Sulfur Dioxide	2.3 pounds per million Btu heat input.	15A NCAC 02D .0516
Particulate Matter	0.10 g/dscm (0.044gr/dscf) corrected to 8 percent oxygen	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 8 percent oxygen	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
Visible Emissions	Visible emissions shall not be more than 35 percent opacity	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 B	15A NCAC 02D .1111 (40 CFR Part 63 Subpart MM)
Regulated NSR Pollutants	See Permit Condition 2.2 D	15A NCAC 02D .0530(u) **See Section 2.3 SOC requirements**
CO	BACT limits: i. staged combustion; ii. good combustion practices; and iii. CO emissions from the Recovery Furnace shall not exceed the limit of 300 ppm at 8% O2 (24-hour average).	15A NCAC 02D .0530
CO	See Permit Condition 2.2 D. 7.	15A NCAC 02D .0530(u)

1. 15A NCAC 02D .0508: PARTICULATES FROM PULP AND PAPER MILLS

a. Emissions from the production of pulp and paper that are discharged from this source into the atmosphere shall not exceed:
   i. 3.0 pounds of particulate matter per equivalent tons of air dried pulp. [15A NCAC 02D .0508(a)]

   Testing [15A NCAC 02D .0501(c)(4)]

b. i. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

   Additional Testing

   ii. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit given in Section 2.1 I. 1. a., above, by testing the Recovery Furnace (ID No. ES 445-001) when emissions are controlled by the operation of both the chambers of the two-chamber electrostatic precipitator (ID Nos. CD-455-340 and CD- 55-369) (normal operation) AND while operating only one chamber of the ESP (AOS scenario). The Permittee shall ensure that the ESP chambers (ID Nos. CD-455-340 and CD- 55-369) are tested for total particulate matter (filterable and condensable) in accordance with a testing protocol approved by the DAQ. The testing shall be completed and the results submitted within 7/8/2013, unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 I. 1. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the Recovery Boiler (ID No. ES 445-001) for total particulate matter (filterable and condensable unless otherwise exempted per 02D. 2609) in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. In addition, the Permittee shall record and include in the test report the results of the monitoring requirements for this source (as specified in Section 2.2 B pursuant to 40 CFR 63 Subpart MM) during the test period. The testing shall be performed annually, beginning January 1 2016, or as required. If the results of the

testing demonstrate results at less than 80 percent of the limit above, the testing frequency may be reduced to every five years. If the results of this or any test is above the limit given in Section 2.1 I. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

Monitoring [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Recovery Boiler (ID No. ES 445-001) shall be controlled by the Electrostatic Precipitator (ID Nos. CD-455-340 and CD-455-369). To assure compliance with the particulate matter standard, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508 if the monitoring and recordkeeping is not conducted.

Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The maximum sulfur content of any No. 2, No. 4, or 6 fuel oil received and burned in the boiler shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the fuel oil exceeds this limit.

d. To assure compliance, the Permittee shall monitor the sulfur content of the fuel oil by using fuel oil supplier certification per month. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a semiannual basis and include the following information:
   i. the name of the fuel oil supplier;
   ii. the maximum sulfur content of the fuel oil received during the period;
   iii. the method used to determine the maximum sulfur content of the fuel oil; and
   iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the fuel oil fired during the period.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the oil is not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the fuel oil supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0524: NSPS 40 CFR SUBPART BB

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. Per 40 CFR Part 60, Subpart BB, emissions from the Recovery Boiler (ID No. ES 445-001) shall not exceed:
   i. 0.10 g/dscm (0.044 gr/dscf) of particulate matter corrected to 8 percent oxygen. [40 CFR Part 60, Subpart 60.282(a)(1)(i)];
   ii. 35 percent opacity [40 CFR Part 60, Subpart 60.282(a)(1)(ii)]; and
   iii. 5 ppm of TRS by volume measured as hydrogen sulfide on a dry basis, corrected to 8percent oxygen based on a 12-hour average [40 CFR Part 60, Subpart 60.283(a)(2) and 60.284(c)].

Testing [15A NCAC 02Q .0508(f)]

c. i. The Permittee shall demonstrate compliance with the emission limit above by testing the Recovery Boiler (ID No. ES 445-001) for particulate matter accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. Testing shall be completed within 60 days after achieving the maximum production rate at which the Recovery Boiler will be operated, but not later than 180 days after initial startup of the upgraded Recovery Boiler. If the results of this or any test is above the limit given in Section 2.1 I. 3. b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Additional Testing

ii. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit given in Section 2.1 I. 3. b., by testing the Recovery Furnace (ID No. ES 445-001) when emissions are controlled by the operation of both the chambers of the two-chamber electrostatic precipitator (ID Nos. CD-455-340 and CD- 55-369) (normal operation) **AND** while operating only one chamber of the ESP (AOS scenario). The Permittee shall ensure that the ESP chambers (ID Nos. CD-455-340 and CD- 55-369) are tested for total particulate matter (filterable) in accordance with a testing protocol approved by the DAQ. The testing shall be completed and the results submitted within 7/8/2013, unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 I. 3. b., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Recovery Boiler (ID No. ES 445-001) shall be controlled by the Electrostatic Precipitator (ID Nos. CD-455-340 and CD-455-369). To assure compliance with the particulate matter standard, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the monitoring and recordkeeping is not conducted.

e. 40 CFR § 60.284(a)(1) - Permittee shall calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from any Recovery Boiler. The span of this system shall be set at 70 percent opacity.

f. 40 CFR § 60.284(a)(2) - The Permittee shall calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere. These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set:
   i. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
   ii. At 25 percent oxygen for the continuous oxygen monitoring system.

Reporting/ Recordkeeping [15A NCAC 02Q .0508(f)]

g. 40 CFR § 60.284(d) –reporting of excess emissions.

h. The Permittee shall submit a summary report of the monitoring and recordkeeping activities, acceptable to the Regional Air Quality Supervisor, within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained as described above.

4. Alternate Operating Scenario (AOS)

a. As an Alternate Operating Scenario (AOS) the Permittee can operate the Recovery Boiler (ID No. ES 445-001) while only one of the chambers of the dry bottom, two-chamber electrostatic precipitator (ID Nos. 445-340 and CD 445-369) is in operation.
b. The hours of operation of the Recovery Boiler (ID No. ES 445-001) while only one of the chambers of the dry bottom, two-chamber electrostatic precipitator (ID Nos. CD 445-340 and CD 445-369) is in operation, should not exceed 500 hours per consecutive 12-month period.

5. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for
15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The hours of operation of the Recovery Boiler (ID No. ES 445-001) while only one of the chambers of the dry bottom, two-chamber electrostatic precipitator (ID Nos. CD 445-340 and CD 445-369) is in operation, should not exceed 500 hours per consecutive 12-month period.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the hours of operation of the Recovery Boiler (ID No. ES 445-001) exceed 500 hours per consecutive 12-month period, while only one of the chambers of the two-chamber electrostatic precipitator (ID Nos. CD 445-340 and CD 445-369) is in operation (AOS).

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]
b. During the AOS the Permittee shall keep daily records of the hours of operation of the electrostatic precipitator (ID Nos. CD 445-340 and CD 445-369), in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the hours of operation are not monitored.

Reporting [15A NCAC 02Q .0508(f)]
c. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
i. The monthly hours of operation of the electrostatic precipitator (ID Nos. CD 445-340 and CD 445-369) during the AOS mode, for the previous 17 months. The hours of operation must be calculated for each of the 12-month periods over the previous 17 months.
d. After completion of the testing specified in Section 2.1 I. 1. b. ii., of the permit above, the Permittee shall demonstrate compliance with the PSD avoidance emission limit given in Section 2.1 I. 5. a., above. Within 7/8/2013, unless an alternate date is approved by the DAQ, the Permittee shall provide calculations using these test data for filterable particulate matter, condensable particulate matter , and AOS test data to demonstrate compliance with the limits in Section 2.1 I. 5. a., above. The facility shall be deemed in noncompliance with 15ANCAC 02D.0530 if it fails to to demonstrate compliance with the PSD avoidance limits in Section 2.1 I. 5. a., above.

6. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The following Best Available Control Technology (BACT) limits for CO emissions from the Recovery Boiler (ID No. ES 445-001) is: [15A NCAC 02D .0530]
i. staged combustion;
ii. good combustion practices; and
iii. CO emissions from the Recovery Furnace shall not exceed the limit of 300 ppm at 8% O_2 (24-hour average).

Testing [15A NCAC 02Q .0508(f)]
b. To comply with the CO emissions limits from the Recovery Boiler (ID No. ES 445-001) the Permittee shall conduct an annual stack test. The testing shall be performed in accordance with General Condition JJ found in Section 3 of this permit. If the results of this test are above the limits given in Section 2.1 I. 6. a. iii., above, the Permittee shall be

deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring [15A NCAC 02Q .0508(f)]

c. None

Recordkeeping [15A NCAC 02Q .0508(f)]

d. None

Reporting [15A NCAC 02Q .0508(f)]

e. None

J. Smelt Dissolving Tank (ID No. ES 445-121), Controlled by a Wet Scrubber (ID No. CD 445-370) and the Recovery Boiler (ID No. ES 445-001)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	0.6 pounds per equivalent tons of air dried pulp	15A NCAC 02D .0508
Particulate Matter	0.2 pounds per ton of black liquor solids (BLS)	15A NCAC 02D .0524 (NSPS Subpart BB)
Visible Emissions	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.	15A NCAC 02D .0521
Total Reduced Sulfur (TRS)	0.033 pounds per ton of black liquor solids (BLS)	15A NCAC 02D .0524 (NSPS Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 B	15A NCAC 02D .1111 (40 CFR Part 63 Subpart MM)
TRS (total reduced sulfur)	Less than 10 tons per consecutive twelve month period during the AOS	15A NCAC 02Q .0317 (15A NCAC 02D .0530)

1. 15A NCAC 02D .0508: PARTICULATES FROM PULP AND PAPER MILLS

a. Emissions from the production of pulp and paper that are discharged from this source into the atmosphere shall not exceed:
i. 0.6 pounds of particulate matter per equivalent tons of air dried pulp. [15A NCAC 02D .0508(a)]

Testing [15A NCAC 02D .0501(c)(4)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 J. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

c. No testing other than that required under permit condition 2.1 I.1.c is required to demonstrate compliance with the emission limit above provided the Smelt Dissolving Tank is being vented into the Recovery Boiler. The Permittee may demonstrate compliance with the emission limit above when venting to the atmosphere following the wet scrubber by conducting a performance test according to a protocol approved by the DAQ. Details of emissions testing and reporting requirements can be found in Section 3 - General Condition JJ.

Monitoring [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Smelt Dissolving Tank (ID No. ES 445-121) shall be controlled by the Wet Scrubber (ID No. CD 445-001). To assure compliance, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508 if this monitoring is not conducted or the records are not kept

Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0524: NSPS 40 CFR SUBPART BB

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting,

recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. Per 40 CFR Part 60, Subpart BB, emissions from the Smelt Dissolving Tank (ID No. ES 445-121) shall not exceed:
   i. 0.1 g of particulate matter/kg black liquor solids (dry weight) [0.2 lb of particulate matter/ton black liquor solids (dry weight)] [40 CFR Part 60, Subpart 60.282(a)(2)];
   ii. 0.016 g of TRS/kg black liquor solids as H_2S (0.033 lb/ton black liquor solids as H_2S). [40 CFR Part 60, Subpart 60.283(a)(4)]

Testing [15A NCAC 02Q .0508(f)]

c. No additional testing other than that required under permit condition 2.1 I.3.c is required to demonstrate compliance with the emission limit above provided the Smelt Dissolving Tank is being vented into the Recovery Boiler. Details of emissions testing and reporting requirements can be found in Section 3 - General Condition JJ.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Smelt Dissolving Tank (ID No. ES 445-121) shall be controlled by the Wet Scrubber (ID No. CD 445-001). To assure compliance, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if this monitoring is not conducted or the records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the smelt tank (ID Nos. ES 445-121) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (c)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J. 3. a. (ID No. ES-445-121) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. To assure compliance, the Permittee shall follow the 40 CFR 63 Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 02D .0521 if the monitoring and recordkeeping are not maintained.

4. Alternate Operating Scenario (AOS)

a. As an Alternate Operating Scenario (AOS) the Permittee can bypass the Recovery Boiler (ID No. ES 445-001) and have the emissions from the Smelt Dissolving Tank (ID No. 445-121) only controlled by the Wet Scrubber (ID No. CD 445-370).

b. During this period of Alternate Operating Scenario (AOS) the Permittee must follow the following requirements:

1. The Recovery Boiler (ID No. ES 445-001) can burn no more than 2.18 million pounds of black liquor solids per day;
2. The caustic addition to the Wet Scrubber (ID No. CD 445-370) shall be at least 15 gallons per minute (3-hour average);
3. The minimum flow rate of the Wet Scrubber (ID No. CD 445-370) must be at least 1,950 gallons per minute (3-hour average); and
4. The non-condensable gases (NCGs) are to be routed to other control devices permitted for the control of non-condensable gases (NCGs).
5. The Permittee shall record the date and start time of the Alternate Operating Scenario (AOS) and the duration.

During the period of Alternate Operating Scenario (AOS) if the Recovery Boiler (ID No. ES 445-001) burns more than 2.18 million pounds of black liquor solids per day, or the caustic addition to the Wet Scrubber (ID No. CD 445-370) is less than 15 gallons per minute, or the minimum flow rate of the Wet Scrubber (ID No. CD 445-370) is less than 1,950 gpm, or the non-condensable gases (NCGs) are vented to the Recovery Boiler (ID No. ES 445- 001), or the Permittee fails to record date/start time/duration of the Alternate Operating Scenario (AOS), then the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 and in noncompliance with 15A NCAC 02D .1111.

5. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, the Permittee during the period of the Alternate Operating Scenario (AOS) of the Smelt Dissolving Tank (ID No. 445-121) as described above in 2.1 J. 4., above, shall discharge into the atmosphere less than 10 tons of TRS (total reduced sulfur) per consecutive twelve month period:

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section in 2.1 J. 5. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/ Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure that emissions are less than the above-specified limits, the Permittee shall record the date and start time of the Alternate Operating Scenario (AOS) and the duration.
d. The Permittee shall calculate and record the emissions of TRS (total reduced sulfur) during the Alternate Operating Scenario (AOS) by using an emission factor of 0.014 lb of TRS per ton of black liquor solids (TBLS) processed in the Smelt Dissolving Tank (ID No. 445-121).
"The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the TRS emissions exceed the limit above, or if the Permittee fails to record date/start time/duration of the Alternate Operating Scenario (AOS), or fails to record and calculate the emissions of TRS (total reduced sulfur) during the Alternate Operating Scenario (AOS).

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of emissions of TRS (total reduced sulfur) during the Alternate Operating Scenario (AOS) from the Smelt Dissolving Tank (ID No. 445-121), and postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:
   i) The monthly emissions of TRS (total reduced sulfur) during the Alternate Operating Scenario (AOS) from the Smelt Dissolving Tank (ID No. 445-121) for the previous 17 months. The total quantities of TRS (total reduced sulfur) during the Alternate Operating Scenario (AOS) must be calculated for each of the 12-month periods over the previous 17 months.

K. Lime Kiln – Residual Fuel Oil/Natural Gas/LVHC Gases-Fired (118 million Btu per hour nominal maximum heat input rate) (ID No. ES 455-061), Controlled by the Electrostatic Precipitator (ID No. CD-455-433)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	0.5 pounds per equivalent tons of air dried pulp	15A NCAC 02D .0508
Sulfur Dioxide	2.3 pound per million Btu heat input	15A NCAC 02D .0516
Opacity	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.	15A NCAC 02D .0521
Particulate Matter	0.13gr/dscf corrected 10 percent oxygen when fuel oil is being fired, and 0.066 gr/dscf corrected to 10 percent oxygen when natural gas is being fired.	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
Total Reduced Sulfur (TRS)	8 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 B	15A NCAC 02D .1111 (40 CFR Part 63 Subpart MM)

1. 15A NCAC 02D .0508: PARTICULATES FROM PULP AND PAPER MILLS

a. Emissions from the production of pulp and paper that are discharged from this source into the atmosphere shall not exceed:
   i. 0.5 pounds of particulate matter per equivalent tons of air dried pulp. [15A NCAC 02D .0508(a)]

Testing [15A NCAC 02D .0501(c)(4)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 K. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the Lime Kiln (ID No. ES 455-061)) for total particulate matter (filterable and condensable unless otherwise exempted per 02D. 2609) in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. In addition, the Permittee shall record and include in the test report the results of the monitoring requirements for this source (as specified in Section 2.2 B pursuant to 40 CFR 63 Subpart MM) during the test period. The testing shall be performed annually or as required. If the results of the testing demonstrate results at less than 80 percent of the limit above, the testing frequency may be reduced to every five years. If the results of this or any test is above the limit given in Section 2.1 I. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

Monitoring [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Lime Kiln (ID No. ES 455-061) shall be controlled by the Electrostatic Precipitator (ID No. CD 455-433). To assure compliance with the particulate matter limitation, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring, recordkeeping and reporting requirements as specified in Section 2.2 B. of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508 if these parameters are not monitored or these records are not maintained.

Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping postmarked on or before

January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The maximum sulfur content of any No. 4 or 6 fuel oil received and burned in the kiln shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the fuel oil exceeds this limit.

d. To assure compliance, the Permittee shall monitor the sulfur content of the fuel oil by using fuel oil supplier certification per month. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a semiannual basis and include the following information:
   i. the name of the fuel oil supplier;
   ii. the maximum sulfur content of the fuel oil received during the period;
   iii. the method used to determine the maximum sulfur content of the fuel oil; and
   iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the fuel oil fired during the period.

e. No Monitoring/Recordkeeping/reporting is required from the firing of Natural Gas in this source for this regulation.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the oil is not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a summary report of the fuel oil supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the lime kiln (ID No. ES 455-061) shall not be more than 20 percent opacity when averaged over a six-minute period. [15A NCAC 02D .0521 (d)]

b. For sources using a continuous opacity monitoring systems (COMS), compliance with the 20 percent opacity limit shall be determined as follows:[15A NCAC 02Q .0508(f))]
   i. No more than four six-minute periods shall exceed the opacity standard in any one day; and
   ii. The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

Excess emissions during startup and shutdown shall be excluded from the determinations in paragraphs 2.1 K.3 b.i. and b.ii. above, if the excess emissions are exempted according to the procedures set out in 02D .0535(g). Excess emissions during malfunctions shall be excluded from the determinations in paragraphs b.i. and b.ii. above, if the excess emissions are exempted according to the procedures set out in 02D .0535(c).

All periods of excess emissions shall be included in the determinations in paragraphs b.i. and b.ii above until such time that the excess emissions are exempted according to the procedures in 02D .0535.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K.3 above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. Continuous emissions monitoring and recordkeeping of opacity shall be performed as described in Section 2.2 B below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if the monitoring is not performed, if the monitored values exceed the limitations given in 2.1 K.3 above, or if the records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a quarterly summary report of the monitoring and recordkeeping activities by January 30, April 30, July 30, and October 30 of each calendar year. All instances of deviations from the requirements of this permit must be clearly identified.

The Permittee shall submit a summary report of the monitoring and recordkeeping activities, acceptable to the Regional Air Quality Supervisor, within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained as described above.

4. 15A NCAC 02D .0524: NSPS 40 CFR SUBPART BB

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."[15A NCAC 02D .0524]

Emissions Limitations [15A NCAC 02D .0524]

b. Per 40 CFR Part 60, Subpart BB, emissions from the Lime Kiln (ID No. ES 455-061) shall not exceed:
   i. 0.13 gr/dscf of particulate matter corrected to 10 percent oxygen when firing fuel oil and 0.066 gr/dscf of particulate matter corrected to 10 percent oxygen when firing natural gas. [40 CFR Part 60, Subpart 60.282(a)(3)(i) and (ii)]
   ii. 8 ppm of TRS by volume on a dry basis, corrected to 10 percent oxygen based on a 12-hour average[40 CFR Part 60, Subpart 60.283(a)(5) and 60.284(c)].

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing for PM is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 K. 4.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Lime Kiln (ID No. ES 455-061) shall be controlled by the Electrostatic Precipitator (ID No. CD 455-433). To assure compliance with the particulate matter limitation, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring, recordkeeping and reporting requirements as specified in Section 2.2 B. of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these parameters are not monitored or these records are not maintained.

e. 40 CFR § 60.284(a)(2) - The Permittee shall calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set:
   i. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
   ii. At 25 percent oxygen for the continuous oxygen monitoring system.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall follow the requirements of 40 CFR § 60.284(d) for reporting of excess emissions.

g. The Permittee shall submit a summary report of the monitoring and recordkeeping activities, acceptable to the Regional Air Quality Supervisor, within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained as described above.

L. Lime Slaker (ID No. ES 455-406), Controlled by a Spray Chamber Wet Scrubber (ID No. CD 455-408):

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pound per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.	15A NCAC 02D .0521
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 L. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the Lime Slaker shall be controlled by the wet scrubber (ID Nos. CD-455-408). To ensure compliance and the effective operation of the scrubber, the Permittee shall monitor and record, once per day, the scrubber solution flow rate. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If the emission source(s) is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. The readings shall be recorded in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. To ensure quality, the flow rate gauges or devices shall be calibrated annually. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

d. The Permittee shall establish a "normal range" for flow rate readings in the first 30 days following the effective date of the permit and submit the proposed ranges to the DAQ for incorporation into this permit within 60 days of the effective date of Permit 02950T43. If the flow rate readings recorded as required in Section 2.1. M.1.c., above, are observed to be outside the normal range, the Permittee shall inspect the scrubber for malfunctions and clean or repair, as necessary. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the inspections, cleaning, and repairs are not performed.

e. The results of inspection and maintenance activities, discussed above for the scrubber, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The logbook shall record the following:
   i. the date and time of each recorded action
   ii. the results of each inspection;

iii. the normal operating range for the scrubber parameters;
iv. the causes for any variance from the normal operating range for the scrubber; and
v. corrective actions taken.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the scrubber within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the Lime Slaker (ID No. ES 455-406) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 L. 2. a. (ID No. ES 455-406) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. The Permittee shall establish normal for the source in the first 30 days following the effective date of Permit 02950T43. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 L.2. a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

M. Lime Conveyor Transfer Points (ID Nos. ES 455-059), Hot Lime Pan Conveyor (ID No. ES 455-073-08), Hot Lime Crusher (ID No. ES 455-072-00), Hot Lime Bucket Elevator (ID No. ES 455-074-08), Hot Lime Bin (ID No. ES 455-075-02), and Fresh Lime Bin (ID No. ES 455-749-02) controlled by a bagfilter (ID No. CD-455-751-00) installed in series with a simple cyclone (ID No. CD 455-754-00):

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pound per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 90 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 M. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources shall be controlled by the bagfilter and cyclone. To assure compliance, the Permittee shall perform inspections and maintenance, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's and cyclone's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, bagfilter and cyclone are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilter or cyclone; and
   iv. any corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a

written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 M. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. The Permittee shall establish normal for the source in the first 30 days following the effective date of Permit 02950T43. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 M. 2.a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

N. The Lignin Solids Recovery System consisting of:

Lignin Solids Removal System Pilot Plant (ID No. ES 470-001) Controlled by a NCG Caustic Scrubber Spray Tower (ID No. CD-470-009, 735 gallons per minute nominal injection rate during primary operating scenario and a minimum flow rate of 1,950 gallons per minute during alternate operating scenario), and
Lignin Solids Handling Process System (ID No. 470-002).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Visible Emissions	Visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four (4) times in any 24-hour period.	15A NCAC 02D .0521
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Regulated NSR Pollutants	See Permit Condition 2.2 D	15A NCAC 02D .0530(u)

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the Lignin Solids Removal System (ID No. ES 470-001 and 470-002) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 N. 1. a. (ID No. ES 470-001 and 470-002) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission point of this source for any visible emissions above normal. If the emission sources are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. The Permittee shall establish normal for the source in the first 30 days following the modification of the Lignin Removal System Pilot Plant (ID No. 470-001). If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 N. 1. a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each

calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

Emission Standard

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the Lignin Solids Recovery System (ID No. ES 470-001) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from propane for this source.

O. Diesel-fired Fire Water Pump Engine (ID No. ES 100-004) Leachate Canal Diesel-fired Pump Engine (ID No. ES 185-118)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Multiple pollutants	See Section 2.1 O. 3	15A NCAC 02D .0524 (40 CFR Part 60, Subpart IIII)
Hazardous Air Pollutants	Meet the requirements of NSPS Subpart IIII	15A NCAC 02D .1111 (40 CFR Part 63 Subpart ZZZZ)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 O. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 O. 2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of diesel fuel in these sources.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

Applicability [15A NCAC 02Q .0508(f), 40 CFR 60.4200(a)(2)(i) and (ii)]

a. For the **Leachate Canal Diesel Pump (ID No. ES 185-118)** and **Fire Water Pump Engine (ID No. ES 100-004**), the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

General Provisions [15A NCAC 02Q .0508(f)]

b. Pursuant to 40 CFR 60.4218, The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII.

Emission Standards [15A NCAC 02Q .0508(f)]

c. The Permittee shall comply with the emission standards in 40 CFR 60.4202 **(ID No. ES 185-118)** and Table 4 of NSPS Subpart IIII **(ID No. ES 100-004**) for all pollutants, for the same model year and maximum engine power for these engines. [40 CFR 60.4205(b) and (c)]

Fuel Requirements [15A NCAC 02Q .0508(f)]

d. The Permittee shall use diesel fuel in the engines that meet the requirements of 40 CFR 80.510(b) including:
   i. a maximum sulfur content of 15 ppm; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
   [40 CFR 60.4207(b)]

Testing [15A NCAC 02Q .0508(f)]

e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in conditions 2.1 O. 3. c and 2.1 O. 3. d, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

f. The engines have the following monitoring requirements:
   i. The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
   ii. The engines, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

Compliance Requirements [15A NCAC 02Q .0508(b)]

g. The Permittee shall:
   i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
   ii. change only those emission-related settings that are permitted by the manufacturer; and
   iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable.
   [40 CFR 60.4206 and 60.4211(a)]

h. The Permittee shall comply with the emission standards in condition 2.1 O. 3. c. by purchasing an engine certified to the emission standards in condition 2.1 O. 3. c above. The engines shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]

i. In order for the engines to be considered emergency stationary ICEs under this condition, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
   i. There is no time limit on the use of emergency stationary ICE in emergency situations.
   ii. The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs i. ii. A through C of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 2.1 O. 3. i. iii. of this condition counts as part of the 100 hours per calendar year allowed by this paragraph 2.1 O. 3. i. ii.
      A. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
      B. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC)

Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

C. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2.1 O. 3. i. ii. of this condition. Except as provided in paragraph 2.1 O. 3. i. iii. A of this condition, the 50 hours per calendar year for non- emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
D. The power is provided only to the facility itself or to support the local transmission and distribution system.
E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the requirements in conditions f. through i. are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

j. To assure compliance, the Permittee shall perform inspections and maintenance on the engines as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the engine;
   iv. any variance from manufacturer's recommendations, if any, and corrections made;
   v. the hours of operation of the engine in emergency and non-emergency service. [40 CFR 60.4214(b)]
   vi. if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)]; and
   vii. documentation from the manufacturer that the engine is certified to meet the emission standards in condition 2.1 O. 3. c.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

k. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

l. If the Permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in conditions 2.1 O. 3. i. ii. B and C or that operates for the purposes specified in condition 2.1 O. 3. i. iii. A, the Permittee shall submit an annual report according to the requirements at 40 CFR 60.4214(d). Thus report must be submitted to the Regional Supervisor and the EPA. [40 CFR 60.4214(d)]

4. 15A NCAC 02D .1111 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 6590(a)(2)(ii)]

a. For these engines (stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ, "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to Regulations under 40 CFR Part 60 [15 A NCAC 02Q. 0508(f)]

b. Pursuant to 40 CFR 63.6590(c)(6), these sources must meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR part 60 Subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.

If the requirements in condition b. are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. 40 CFR 63, Subpart S Affected Sources:

Source ID No.	Source Description	Control ID No	Control Description
Bleaching System Sources			
ES 425-047	D1 Stage Tower	CD 425-101	Bleach Plant Fluidized Bed Wet Scrubber (via closed-vent collection system)
ES 425-054	D1 Stage ClO2 Seal Box		
ES 425-052	D1 Bleach Hood and Washer		
ES 425-076	D2 Stage Tower		
ES 425-083	D2 Stage ClO2 Seal Box		
ES 425-081	D2 Bleach Washer		

Source ID No.	Source Description	Control ID No	Control Description
LVHC System Sources			
Foul Condensate Handling System			
ES 161-078	Steam Stripper	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler (via closed-vent Collection System)
ES 401-007	Stripper Feed Tank No. 1	ES 161-001	No. 2 Power Boiler or Recovery Boiler (via closed-vent Collection System) Or Lime Kiln (via closed-vent Collection System)
ES 401-013	Stripper Feed Tank No. 2	or	
ES 161-484	LVHC Foul Gas Collection System Cooler	ES 455-061	
Turpentine System			
ES 401-704	Turpentine Decanter	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler (via closed-vent Collection System) or Lime Kiln (via closed-vent Collection System)
ES 401-709	Underflow Decanter	or	
ES 402-211	Primary Condenser	ES 455-061	
ES 402-220	Secondary Condenser		
ES 401-071-02	Turpentine Storage Tank		
Digester System			
ES 402-141*	Continuous Digester*	ES 161-001 or ES 445-061 or ES 445-001	No. 2 Power Boiler or Lime Kiln (via closed-vent Collection System) or Recovery Boiler (via closed-vent collection system)
Evaporator Area			
ES 440-008	Evaporator/Concentrator Hotwell System	ES 161-001 or ES 445-001 or ES 455-061	No. 2 Power Boiler or Recovery Boiler (via closed-vent Collection System) or Lime Kiln (via closed-vent Collection System)
ES 440-713	No. 1 Pre-Evaporator		
ES 440-719	No. 2 Pre-Evaporator		
ES 440-720	No. 3 Pre-Evaporator		

Source ID No.	Source Description	Control ID No	Control Description
ES 440-016	1A Effect Evaporator	ES 161-001 or ES 445-001 or ES 455-061	No. 2 Power Boiler or Recovery Boiler (via closed-vent Collection System) or Lime Kiln (via closed-vent Collection System)
ES 440-015	1B Effect Evaporator		
ES 440-014	Second Effect Evaporator		
ES 440-013	Third Effect Evaporator		
ES 440-012	Fourth Effect Evaporator		
ES 440-011	Fifth Effect Evaporator		
ES 440-009	Sixth Effect Evaporator		
ES 440-400	C-1 Black Liquor Concentrator		
ES 440-401	C-2 Black Liquor Concentrator		
ES 440-850	HSC 1 Concentrator		
ES 440-852	HSC 2 Concentrator		

Source ID No.	Emission Source Description	Control ID No.	Control Description
HVLC System Sources			
ES 402-722	HVLC Foul Gas Collection System Cooler	ES 161-001 or ES 445-001	No. 2 Power Boiler (via closed-vent Collection System) or Recovery Boiler (via closed-vent collection system)
ES 402-943	HVLC Gas Collection System Cooler		
Digester Area			
ES 402-119*	Chip Bin	ES 161-001 or ES 445-001	No. 2 Power Boiler (via closed-vent Collection System) or Recovery Boiler (via closed-vent collection system)
ES 402-179*	Blow Tank		
ES 402-190*	Filtrate Wash Liquor Tank		
ES 402-150*	Primary Flash Tank		
ES 402-151*	Secondary Flash Tank		
Washing and Screening			
ES 420-025	Foam Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler (via closed-vent Collection System) or Recovery Boiler (via closed-vent collection system)
ES 420-006	Filtrate Storage Tank No. 1		
ES 420-008	Filtrate Storage Tank No. 2		
ES 420-010	Brownstock Washer System		
ES 420-044	Brown Stock Decker		
ES 420-123	Primary Rejects Tank (190)	NA	None**
ES 420-140	Secondary Rejects Tank (192)	NA	None**
Oxygen Delignification Area			
ES 420-229	Oxygen Blow Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler (via closed-vent Collection System) or Recovery Boiler (via closed-vent collection system)
ES 420-235	No. 1 Press Washer		
ES 420-259	No. 1 Press Washer Level Tank		
ES 420-261	No. 1 Press Washer Filtrate Tank (12)		
ES 420-280	No. 2 Press Washer	ES 161-001 or ES 445-001 only during AOS 1	No. 2 Power Boiler or Recovery Boiler (via closed-vent Collection System) only during AOS 1 when No. 1 Wash Press is temporarily out of service
ES 420-302	No. 2 Press Washer Level Tank		
ES 420-306	No. 2 Press Washer Filtrate Tank		

* The Digester (ID No. ES 402-141) is included with the closed-vent system for the Digester System as detailed in Specific Condition 2.1 G.
** This source is not subject to the HVLC control requirements under 63.443(c) and (d) as total HAP emissions from the screen system (measured as methanol) are less than 0.2 lbs per ton of oven dry pulp.

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	**Bleaching System** 10 ppmv total chlorinated HAP or 99 percent reduction by weight **LVHC System** Route system vents to Recovery Boiler, Lime Kiln or No. 2 Power Boiler **HVLC System** Route applicable system vents to No. 2 Power Boiler or Recovery Boiler **Pulping Condensate Collection** Collect a minimum 11.1 pounds per ton ODP followed by treatment in the Steam Stripper meeting: 92 percent HAP removal, or 10.2 pounds per ton ODP removal	15A NCAC 02D .1111 (40 CFR 63 Subpart S)

The sources below are MACT affected source but are not required by MACT to be controlled and there are no requirements

ES 420-332	Brown Decker Filtrate Tank (189)	Not required by MACT to be controlled
ES 420-325	Brown Stock Washed HD Chest (3)	Not required by MACT to be controlled
ES 420-274	Oxygen Interstage Pulp Tank	Not required by MACT to be controlled
ES 425-032	Pre-Bleach Tower	Not required by MACT to be controlled
ES 425-036	Pre-Bleach Washer	Not required by MACT to be controlled
ES 425-038	Pre-Bleach Seal Tank	Not required by MACT to be controlled
ES 425-118	No. 2 Bleached Deckers	Not required by MACT to be controlled

1. 15A NCAC 02D .1111: MACT 40 CFR 63 SUBPART S

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart S, including Subpart A "General Provisions" as defined per 63.440(g) and indicated per Table 1 of Subpart S. These emission standards shall apply at all times except as otherwise specified in 40 CFR Part 63, Subpart S. Terms used throughout this section are defined in the Clean Air Act as amended in 1990 and in 40 CFR 63.2 and 63.441. Units and abbreviations are defined in 40 CFR 63.3 [15A NCAC 02D .1111]

Emission Limitations [15A NCAC 02D .1111]

Standards for the Bleaching System [40 CFR 63.445]

b. The Permittee shall meet the following control requirements for bleaching systems using chlorinated compounds [40 CFR 63, Subpart 63.445]:
   i. The equipment at each bleaching stage of the bleaching systems, where chlorinated compounds are introduced shall be enclosed and vented into a closed vent system meeting the requirements specified in 40 CFR 63.450 and introduce into the Bleach Plant Scrubber (ID No. CD-425-101).
   ii. The scrubber (ID NO. CD 425-101) shall achieve a treatment device outlet concentration of 10 ppmv or less of total chlorinated HAP or achieve a 99 percent reduction by weight: and
   iii. The Permittee shall **not** use hypochlorite or chlorine for bleaching in the bleaching systems listed above.

Standards for the LVHC and HVLC pulping systems at kraft processes [40 CFR 63.443(a)].

c. The Permittee shall meet the following control requirements for the total HAP emissions from the LVHC system [40 CFR 63, Subpart 63.443]:
   i. Each LVHC system component shall be enclosed and vented into a closed vent system meeting the requirements of 40 CFR 63.450, and routed to:
      1. The Lime Kiln (ID No. ES 455-061) by introducing the HAP emission stream with the primary fuel or into the flame zone: or
      2. The No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ES No. 445-001) by introducing the HAP emission stream with the combustion air/primary fuel/into flame zone.

d. The Permittee shall meet the following control requirements for the total HAP emissions from the HVLC system [40 CFR 63, Subpart 63.443]
   i. Each applicable HVLC system component shall be enclosed and vented into a closed vent system meeting the requirements of 40 CFR 63.450 and routed to the No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ID No. ES 445-001) by introducing the HAP emission stream with the combustion air/primary fuel/into flame zone.

e. Periods of excess emissions reported under Sec. 63.455 shall not be a violation of Sec. 63.443 (c) and (d) provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:
   i. One percent for control devices used to reduce the total HAP emissions from the LVHC system;
   ii. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
   iii. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

Standards for Kraft pulping process condensates [40 CFR 63.446].

f. The pulping process condensates as identified per 40 CFR 63.446(b) shall be conveyed in a closed collection system that is designed and operated to meet the following requirements:
   i. Each closed collection system shall meet the individual drain system requirements specified in 40 CFR 63.960, 63.961, and 63.962, except for closed vent systems;
   ii. Closed vent systems shall be designed and operated in accordance with 40 CFR 63.450;
   iii. The process condensate streams collected in total shall contain a minimum of 11.1 pounds of HAP per ton of oven dried pulp produced (based on a 30-day rolling average);
   iv. The Stripper Feed Tanks (ID Nos. ES 401-007 and 401-013) shall meet the requirements per 40 CFR 63.446(d)(2); and
   v. The pulping process condensates collected shall be treated by the Foul Condensate Steam Stripper (ID No. ES 161-078) which shall:
      1. Reduce or destroy the total HAPs by at least 92 percent or more by weight; or
      2. Remove a minimum of 10.2 pounds per ton of oven dried pulp (ODP); and
   vi. For each steam stripper system used to comply with the requirements specified in paragraph 63.446(e)(3), periods of excess emissions reported under Sec. 63.455 shall not be a violation of paragraphs 63.446(d), (e), and (f) provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent

g. **Testing** [15A NCAC 02Q .0508(f)]
If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in Section 2.2 A.1 b. through e. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

i. **Testing Requirements**
Within 60 days of achieving the maximum production rate, but no later than 180 after making the Bleach Plant modifications (Application 2500104.10B, Permit 02590R42), the Permittee shall demonstrate compliance with the emission limit(s) above by testing the bleach plant wet scrubber in accordance General Condition JJ and shall additionally re-establish appropriate CMS monitoring parameters. Any change in CMS parameters shall be submitted to DAQ for incorporation into the permit. Such change to the permit may be made as an administrative amendment.

Monitoring for the Bleaching System Scrubber [40 CFR 63.453]

h. The Permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS), on the Bleach Plant Wet Scrubber (ID No. CD 425-101). The CMS shall include a continuous recorder. The CMS shall be operated to ensure the following operational parameters are maintained [40 CFR 63, Subpart 63.453]:
i. The minimum pH of the scrubber effluent shall be 9.5 (3 hour average);
ii. The scrubber inlet vent gas fan motor load of >=30 percent (3 hour average); and
iii. The minimum scrubber liquid recirculation rate shall be 660 gallons per minute (3 hour average).
If any monitoring parameter values are exceeded or if the monitoring procedures are not followed, the Permittee shall be deemed in noncompliance with 02D .1111.

Monitoring for the LVHC and HVLC pulping systems Control Devices [40 CFR 63.453]

i. No control device parameter monitoring is required for pulping vent systems routed to the Lime Kiln (ID No. ES 455-061), the No. 2 Power Boiler (ID No. ES 161 061), or the Recovery Boiler (ID No. ES 445-001). [40 CFR 60, Subpart 63.453]

Monitoring for the pulping process condensates [40 CFR 63.453]
Condensate Collection:

j. The Permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS) to monitor condensate stream collection. The CMS shall include a continuous recorder. The CMS shall be operated to ensure that the minimum of 11.1 pounds of HAP per ton of oven dried pulp produced (based on a **30-day rolling average**) is collected. The HAP content for each stream shall be validated on an annual basis:
If any monitoring parameter demonstrates collection less than 11.1 pounds per oven dried pulp or if the monitoring procedures are not followed, the Permittee shall be deemed in noncompliance with 02D .1111.

Monitoring for the pulping process condensates [40 CFR 63.453]
Steam Stripper (ID No ES 161-078):

k. The Permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS) on the Steam Stripper (ID No ES 161-078). The CMS shall include a continuous recorder. The CMS shall be operated to ensure the following operational parameters are maintained. [40 CFR 63, Subpart 63.453]:
i. The Steam to Feed Ratio(SFR) shall be maintained above 15.9 percent as defined by the following:

SFR (%) = 100 * [((FS * 1000) – (CF * 7.9 * 60 * (T1-T2)/1000)) / (CF * 7.9 * 60)]

where:

SFR = Steam to Feed Ratio (percent)
FS = Feed Steam in KPPH (thousand pounds per hour)
CF = Condensate Flow in GPM (gallons per minute)
T1 = is the stripper bottom temperature in degrees F
T2 = is the condensate feed temperature in degrees F, and
7.9 = density of hot condensate (pounds per gallon)

If any monitoring parameter values are exceeded or if the monitoring procedures are not followed, the Permittee shall be deemed in noncompliance with 02D .1111.

Monitoring for Enclosures and Closed Vent Systems [40 CFR 63.453]

l. Each enclosure and closed vent system shall meet the monitoring requirements of 40 CFR 63.453. Inspections shall be performed once during each calendar month, with at least 14 days between inspections. The site-specific monitoring plan must identify equipment that is exempt from the 30-day and annual inspection requirements due to safety concerns and describe how the equipment will be inspected and/or repaired during safe-to-inspect and/or repair periods, which must be at least once during each permit term. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the monitoring is not performed.

Recordkeeping/Reporting [40 CFR 63.454; 63.455]

m. The results of the CMS monitoring, Enclosure System monitoring, and Closed-Vent System monitoring shall be maintained (in written or electronic format) per the requirements of 40 CFR 63.454 and 63.455. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

n. When actions taken during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) are not consistent with the procedures specified in the facility's Startup Shutdown Malfunction (SSM) Plan, the Permittee shall record the actions taken for that event for inclusion in the semiannual SSM report. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

o. When actions taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the facility's SSM plan, the Permittee shall keep records for that event that demonstrate that the procedures specified in the SSM plan were followed. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

Reporting [40 CFR 63.454; 63.455]

p. Permittee shall submit a summary report of excess emissions postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. When no exceedances of an operating parameter have occurred, such information shall be included in the report.

q. The Permittee shall comply with the reporting requirements of 40 CFR 63, Subpart A as specified in Table 1 of 40 CFR 63.440.

B. 40 CFR 63, Subpart MM Affected Sources:

Source ID No.	Source Description	Control ID No	Control Description
ES 445-001	Recovery Boiler - Black Liquor Solids/Natural Gas/HVLC gases/LVHC gases/SOG/No. 2, No. 4, and No. 6 Fuel Oil-Fired (4.2 million lbs BLS/day nominal maximum firing rate)	CD 445-073	Two chamber electrostatic precipitator - 201,960 square feet of collection plate area
ES 445-121	Smelt Dissolving Tank	CD 445-370 ES 445-001	Wet Scrubber and Recovery Boiler
ES 455-061	Lime Kiln – Residual Fuel Oil/Natural Gas/LVHC gases-Fired (118 million Btu per hour nominal maximum heat input rate)	CD 455-433	Single-chamber, three-field, high-voltage, negative-corona electrostatic precipitator (30,222 square feet of collection plate area)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	**Recovery Boiler** • PM emissions shall be no greater than 0.044 gr/dscf, corrected to 8% oxygen. • Opacity shall not be greater than 35 percent for more than 6 percent of the operating time within any quarterly period. [note: the 35 percent opacity is a monitoring requirement and not an opacity standard]	• 15A NCAC 02D .1111 (Subpart MM) and 40 CFR 63.862(a)(1)(i)(A) for PM standards for existing Recovery Boilers. • 15A NCAC 02D .1111 (Subpart MM) and (40 CFR 63.864 monitoring requirements; 63.864 (k) ongoing compliance conditions; 63.864(k)(2)(i) for an existing kraft Recovery Boiler equipped with an ESP.
	Lime Kiln • PM emissions shall be no greater than 0.064 gr/dscf, corrected to 10% oxygen. • Opacity shall not be greater than 20 percent for more than 6 percent of the operating time within any quarterly period. [note: the 20 percent opacity is a monitoring requirement and not an opacity standard]	• 15A NCAC 02D .1111 (Subpart MM) and 40 CFR 63.862(a)(1)(i)(C) for PM standards for existing Lime Kilns. • 15A NCAC 02D .1111 (Subpart MM) and 40 CFR 63.864 monitoring requirements; 63.864 (k) ongoing compliance conditions; 63.864(k)(2)(ii) for an existing lime kiln equipped with an ESP.
	Smelt Dissolving Tank • PM emissions shall be no greater than 0.2 lb/TBLS. • Primary operating scenario: The Permittee may conduct performance testing to establish 3-hour average scrubber pressure drop and flow rate ranges that indicate compliance with the PM limit during periods when the Smelt Dissolving Tank gases **are not** being vented into the Recovery Boiler. • Alternate operating scenario: Reduce Recovery Boiler firing rate to 2.18 million pounds of black liquor solids per day or less (3-hour average),	• 15A NCAC 02D .1111 (Subpart MM) and 40 CFR 63.862(a)(1)(i)(B) for PM standards for existing Smelt Dissolving Tanks. • Primary operating scenario: 15A NCAC 02D .1111 (Subpart MM) and 40 CFR 63.864 monitoring requirements; 63.864 (k) ongoing compliance conditions; 63.864(k)(2)(iii) for an existing smelt dissolving tank equipped with a wet

	route non-condensable gases to other NCG permitted control devices, and vent the smelt dissolving tank through its wet scrubber and to the atmosphere. The Permittee may conduct performance testing to establish 3-hour average scrubber pressure drop and flow rate ranges that indicate compliance with the PM limit.	scrubber. • Alternate operating scenario: 15A NCAC 02D .1111 (Subpart MM) Caustic scrubbing solution addition to the smelt tank scrubber shall be at least 19 gpm (3-hour average) and total scrubbing liquid flow must be at least 1,950 gpm (3-hour average).

1. 15A NCAC 02D .1111: MACT 40 CFR 63, SUBPART MM

Primary operating scenario:

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart MM, including Subpart A "General Provisions" as defined per 63.440(g) and indicated per Table 1 of Subpart MM. These emission standards shall apply at all times except as otherwise specified in 40 CFR 63, Subpart MM. Terms used throughout this section are defined in the Clean Air Act as amended in 1990 and in 40 CFR 63.2 and 63.861. Units and abbreviations are defined in 40 CFR 63.3. [15A NCAC 02D .1111]

Emission Limitations [15A NCAC 02D .1111]

b. Emissions of PM from the Lime Kiln, Recovery Boiler, and Smelt Dissolving Tank shall not exceed the limits presented in the table above. [63.865(a)]

Testing [15A NCAC 02D .1111]

c. If emissions testing is required, emissions testing shall be performed according to the procedures in 63.7, 63.865, and General Condition JJ. If the results of the testing indicate that the emission rate from the Lime Kiln, Recovery Boiler, or Smelt Dissolving Tank is greater than the emission limits presented in the table above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111. [63.865]

Monitoring [15A NCAC 02D .1111]

d. The Permittee must install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) at the outlet of the Recovery Boiler and the outlet of the Lime Kiln that can be used to determine opacity at least once every successive 10-second period and calculate and record each successive 6-minute average opacity. The COMS data must be reduced as specified in 63.8(g)(2). If these monitoring procedures are not followed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111. [63.864(d)(10)]

e. The Permittee must install, calibrate, maintain, and operate a continuous monitoring system that can be used to determine and record the caustic addition flow rate and total scrubber liquid flow rate on the Smelt Dissolving Tank scrubber during periods when the Smelt Dissolving Tank gases are not being vented to the Recovery Boiler. The caustic addition flow rate and total scrubber liquid flow rate must be monitored at least once every successive 15-minute period during periods when the Smelt Dissolving Tank gases are not being vented to the Recovery Boiler using the procedures in 63.8(c). The scrubber flow monitoring systems must be certified by the manufacturer to be accurate within ±5 percent of the design flow rate. If these monitoring procedures are not followed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

f. The Permittee may base operating ranges on values recorded during the initial performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required in Subpart MM. The Permittee must certify that all control devices and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained. The Permittee may establish expanded or replacement operating ranges during subsequent performance tests using the test methods in 63.865. The Permittee must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values. [63.864(j)]

g. The Permittee is required to implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under 63.866(a), if the following monitoring exceedances occur [63.864(k)(1)]:
   i. For the Recovery Boiler and Lime Kiln, when the average of ten consecutive 6-minute averages results in a measurement greater than 20 percent opacity;
   ii. For the Smelt Dissolving Tank, when any 3-hour average scrubber flow rate value is outside the range of values established via performance testing during periods when the Smelt Dissolving Tank gases are not being vented to the Recovery Boiler.

h. The Permittee is in violation of 63.862 if the following monitoring exceedances occur [63.864(k)(2)]:
   i. For the Recovery Boiler, when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period;
   ii. For the Lime Kiln, when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period;
   iii. For the Smelt Dissolving Tank, when six or more 3-hour average scrubber flow rate values within any 6-month reporting period are outside the range of values established via performance testing during periods when the Smelt Dissolving Tank gases are not being vented to the Recovery Boiler.

i. For purposes of determining the number of non-opacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period. [63.864(k)(3)]

Recordkeeping [15A NCAC 02D .1111]

j. The Permittee must develop and implement a written plan as described in 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with Subpart MM. In addition to the information required in 63.6(e), the plan must include the requirements given in 63.866(a)(1) and (2). [63.866(a)]

k. The Permittee must maintain records of any occurrence when corrective action is required under condition 2.2-B.1(g), and when a violation is noted under condition 2.2-B.1(h). [63.866(b)]

l. In addition to the general records required by 63.10(b)(2), the Permittee must maintain records of the following information [63.864 (c)]:
   i. Records of black liquor solids firing rates in units of ton/d for the Recovery Boiler ;
   ii. Records of CaO production rates in units of ton/d for the Lime Kiln;
   iii. Records of parameter monitoring data required under condition 2.2-B.1(e), including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test or subsequent testing, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;
   iv. Records of monitoring parameter ranges established under condition 2.2-B.1(f); and
   v. Records of the hours of operation of the Lime Kiln, Recovery Boiler, and Smelt Dissolving Tank.

Reporting [15A NCAC 02D .1111]

m. The Permittee must notify the Director before any of the following actions are taken [63.867(b)]:
   i. The air pollution control system for any process unit subject to Subpart MM is modified or replaced;
   ii. A continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit subject to Subpart MM is changed; or
   iii. The black liquor solids firing rate for the Recovery Boiler during any 24-hour averaging period is increased by more than 10 percent above the level measured during the most recent performance test.

n. The Permittee must report quarterly if measured parameters meet any of the conditions specified in condition 2.2-B.1(g or h). This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in condition 2.2-B.1(g), and the number and duration of occurrences when the source met or exceeded the conditions in condition 2.2-B.1(h). All instances of deviations from the requirements of this permit must be clearly identified in the

report. Reporting excess emissions below the violation thresholds of conditions 2.2-B.1(g) and (h) does not constitute a violation of the applicable standard. [63.867(c)]

i. When no exceedances of parameters have occurred, the Permittee must submit a semiannual report stating that no excess emissions occurred during the reporting period.
ii. The Permittee may combine excess emissions and/or summary reports for the facility for Subpart MM and Subpart S.

C. RESERVED

D. No 1. Power Boiler (ID No. ES 150-001); No 2. Power Boiler (ID No. ES 161-001); Recovery Boiler (ID No. ES-445-001); Lime Kiln (ID No. ES-455-061); Lignin Solids Removal System (ID No. ES-470-001 and 470-002); Pulp Dryer Operations (ID No. ES 465-001; Pulp Mill; and All 2009 Recovery Boiler Upgrade affected units

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Regulated NSR Pollutants	Projected Actual Emissions Reporting	15A NCAC 02D .0530(u)

1. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

2009 Recovery Boiler Upgrade Project

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the 2009 Recovery Boiler Upgrade Project (Application 2500104.08D, Permit 02590R37) did not result in a significant emissions increase, the Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. In addition to the items listed in below, the report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). This report is only required for the 10 years following implementation of the 2009 Recovery Boiler Upgrade Project. These records and reports shall be maintained for five years following regular operations after the change.

In addition to the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c), the Permittee shall report the following parameters:

Emission Source(s)	Parameter	Projection (annual unless otherwise provided) *
No. 1 Power Boiler	Oil Use	2,655 Mgal
No. 2 Power Boiler	Oil Use Gasifier Gas	4,583 Mgal 637,200 mmBtu
Gasifier	BLS Firing	54,000 tons BLS
Gasifier Preheater	Oil Use	386 Mgal
Recovery Boiler	BLS Firing Oil Use Natural Gas Use	766,500 tons BLS 1,134 Mgal 169 mmscf
Lime Kiln	Lime Throughput	93,232 ton CaO
Pulp Mill	Pulp Production	474,614 ADTP (unbleached)
All 2009 Recovery Boiler Upgrade affected units	CO emissions	662.87 tons

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the Permittee shall include in the annual report an explanation as to why the actual rates exceeded the projection.

2. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

Pilot Lignin Removal System Project Modification

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the Pilot Lignin Removal System Project Modification (Application 2500104.09E, Permit 02590R38)did not result in a significant emissions increase, the Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This report is only required for the five years following implementation of the Pilot Lignin Removal System Project. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). These records and reports shall be maintained for five years following regular operations after the change.

3. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

No. 2 Power Boiler Natural Gas Addition Modification

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the No. 2 Power Boiler Natural Gas Addition Modificatio**n** (Application 2500104.09H, Permit 02590R39)did not result in a significant emissions increase, the owner or operator shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This report is only required for the five years following implementation of the No. 2 Power Boiler Natural Gas Addition. These records and reports shall be maintained for ten years following regular operations after the change. In addition to the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c), the Permittee shall report the following:

Emission Source(s)	Parameter	Projection (annual) *
No. 2 Power Boiler	Oil Use Natural Gas Use	8,237 Mgal 2,293 mmscf

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection.

4. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

Pulp Operations/Dryer Modification

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the Pulp Operations/Dryer Modification (Application 2500104.10A, Permit 02590R40) did not result in a significant emissions increase, the owner or operator shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This report is only required for the ten years following implementation of the Pulp Operations/Dryer Modification. These records and reports shall be maintained for ten years following regular operations after the change. In addition to the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c), the Permittee shall report the following:

Emission Source(s)	Parameter	Projection (annual unless otherwise provided) *
Pulp Dryer	throughput	357,209 ADTFP

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection

5. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

2012 lignin solids removal system

b. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the pilot lignin solids removal system (Application 2500104.12C, Air Permit 02590T45) did not result in a significant emissions increase, the owner or operator shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This report is only required for the ten years following implementation of the pilot lignin solids removal system modification. These records and reports shall be maintained for ten years following regular operations after the change. In addition to the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c), the Permittee shall report the following:

Emission Source	Parameter	Projection (annual unless otherwise provided) *
Lignin Removal System Pilot Plant (ID No. 470-001)	Lignin production	1,000 oven dried ton (ODT) per year.

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection

6. 15A NCAC 02D .0530(u): PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements for installation of turbine generator (38.1 MW), associated with Power Boilers 1 and 2 and Recovery Boiler [Application No. 2500104.13A].

In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the testing, record keeping and reporting requirements in Section 2.2 D.6. b. through d. below.

Testing [15A NCAC 02Q .0308]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ.

Recordkeeping [15A NCAC 02Q .0308]

c. The Permittee shall maintain records of actual emissions (in tons per year) for NO_x, CO, and CO_2e, and fuel usage (fuel oil in gallons, natural gas in sft^3), for Power Boilers 1 and 2, and Recovery Boiler, on a calendar year basis for five years, following the commencement of operation of the turbine generator.

The Permittee shall make the information documented and maintained in this Section 2.2 D.6.c., and available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

Reporting [15A NCAC 02Q .0308]

d. The Permittee shall submit a report for actual emissions for NO_x, CO, and CO_2e, and fuel usage to the Director within 60 days after the end of each calendar year during which the records in Section 2.2 D.6.c. must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

The reported fuel usage for each of the five calendar years will be compared to the respective projection as included below:

Emission Source	Parameters	Projection* (Per consecutive 12-months)
No. 1 Power Boiler	Natural Gas Burning Fuel Oil Burning	167.17 million sft^3 1,391,000 gallons
No. 2 Power Boiler	Natural Gas Burning Fuel Oil Burning	516.99 million sft^3 4,302,000 gallons
Recovery Furnace	Natural Gas Burning or Fuel Oil Burning	276.52 million sft^3 or 1,855,610 gallons

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection.

7. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

2013 Increase the permitted Recovery Furnace throughput to 4.5 million pounds BLS/day

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the "2013 Increase the permitted Recovery Furnace throughput to 4.5 million pounds BLS/day" Upgrade Project (Application 2500104.11B, Permit 02590T48) did result in a significant emissions increase, the Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. In addition to the items listed in below, the report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). This report is only required for the 10 years following implementation of the "2013 Increase the permitted Recovery Furnace throughput to 4.5 million pounds BLS/day" Upgrade Project. These records and reports shall be maintained for five years following regular operations after the change.

In addition to the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c), the Permittee shall report the following parameters:

Emission Sources	Parameter	Projection
No. 1 Power Boiler	Heat Input from Oil or Gas	446,943 MMBtu/yr
No. 2 Power Boiler	Heat Input from Oil or Gas	1,095,000 MMBtu/yr
Recovery Boiler	BLS Firing	821,250 TBLS/yr
	Heat Input from Oil or Gas	756,269 MMBtu/yr
Lime Kiln	Lime Throughput	100,375 T CaO/yr
Pulp Mill	Digester Production	428,413 ADST/yr

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the Permittee shall include in the annual report an explanation as to why the actual rates exceeded the projection.

E. No 1. Power Boiler (ID No. ES 150-001); and No 2. Power Boiler (ID No. ES 161-001)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Filterable PM Mercury Carbon Monoxide	*For Residual Fuel Oil Firing* 0.45 lb/mmBtu 2.0e-05 lb/mmBtu 28 ppmvd at 7% O_2	15A NCAC 02D .1109
Hazardous Air Pollutants	*For No. 2 Fuel Oil & Natural Gas Firing* Best Combustion Practices	

1. 15A NCAC 02D. 1109: 112(j) CASE-BY-CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Emission Limitations for Operating Scenario 1 – Residual Fuel Oil Firing

a. The initial compliance date for these emission limitations and associated testing, monitoring, recordkeeping, and reporting requirements is **January 4, 2014**. These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 02D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

b. Emissions from residual fuel oil firing at the Nos. 1 and 2 Power Boilers (ID Nos. 150-001 and 161-001) shall not exceed the emissions limits listed below:
   i. Particulate matter (filterable): 0.45 lbs/MMBtu
   ii. Mercury: 0.00002 lbs/MMBtu
   iii. Carbon monoxide: 28 ppmvd, 7% oxygen measured on a 30-day average.

   These emissions limitations shall only apply to an affected boiler when the Permittee fires at least 10% residual fuel oil in the combustion source on an annual average heat input basis. If the Permittee fires less than 10% residual fuel oil in an affected combustion source, these emissions limitations and the associated testing, operating limits, monitoring, and recordkeeping requirements shall not apply. However, the Permittee shall retain records of the fuels fired in the boiler in accordance with Specific Condition 2.2 E.1.j. of this permit. Biofuel shall be included with residual fuel oil for the purposes of this paragraph.

Work Practice Standards for Operating Scenario 2 – Natural Gas & No. 2 Fuel Oil Firing

c. The Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer at the affected combustion sources (ID Nos. 150-001 and 161-001), or as a minimum, the inspection and maintenance requirement shall include the following:
   i. Inspect the burner, and clean or replace any components of the burner as necessary;
   ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
   iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

   These work practice standards and associated recordkeeping and reporting requirements shall only apply to an affected boiler when the Permittee fires greater than 90 percent natural gas and/or No. 2 fuel oil in the combustion source on an annual average heat input basis.

   The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected boilers are not inspected and maintained as required above.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date of each recorded action;

ii. The results of each inspection; and,
iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

Compliance Testing for Operating Scenario 1 – Residual Fuel Oil Firing

[15A NCAC 02Q .0508(f)]

e. The Permittee shall conduct compliance tests for each emission limit listed in Condition 2.2 E.1.b. of this permit. The Permittee may choose either of the following methods for the compliance tests:

i. Initial & Periodic Stack Testing. Stack testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ in Section 3 of this permit. Tests may not be conducted during periods of startup, shutdown, or malfunction. Following the initial compliance test, the Permittee shall test the boiler annually. Each stack test shall be conducted between 11 and 13 months after the previous stack test. However, if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit, the stack test frequency shall be reduced to once every five years for that pollutant.

ii. Periodic Fuel Analysis. The Permittee may use a fuel analysis to demonstrate compliance with the mercury standard. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation, the Permittee shall conduct a follow-up stack test of the affected source within 90 days. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109.

The initial compliance test shall be conducted within 180 days of the initial compliance date, as provided in Condition 2.2 E.1.a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required compliance tests are not conducted, or if the results of a compliance test exceed a limit in Section 2.2 E.1.b. above.

Operating Limits for Operating Scenario 1 – Residual Fuel Oil Firing

f. The Permittee shall maintain the following operating parameters at the condensing scrubber (ID No. 161-018):

f.1 The 12-hour average stack gas temperature (degrees F) after the condensing scrubber shall be maintained at or below the operating level established during the most recent performance test that demonstrated compliance with the limits in Condition 2.2 E.(a) of this permit; and,

f.2 The 12-hour average flow rate of the recirculating scrubber reagent (gpm) shall be maintained at or above the operating level established during the most recent performance test that demonstrated compliance with the limits in Condition 2.2 E.(a) of this permit.

Monitoring Requirements for Operating Scenario 1 – Residual Fuel Oil Firing

g. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record the stack gas temperature (degrees F) after the condensing scrubber **(ID No. 161-018)** and the flow rate of the recirculating scrubber reagent (gpm). The monitors must complete a minimum of one cycle of operation for each successive 15-minute period. The monitors must record a minimum of four successive cycles of operation to have a valid hour of data. For the purposes of calculating data averages, the Permittee shall not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required QA/QC activities.

i. For the flow measurement monitor:
(A) The monitor must have a measurement sensitivity of 2% of the flow rate.
(B) Flow sensor calibrations shall be checked at least semiannually.

ii. For the temperature measurement monitor:
(A) The monitor must have an accuracy of ±1% of the measured temperature or 5 degrees F, whichever is greater.
(B) Temperature sensor calibration shall be checked at least annually.

Monitoring Requirements for Operating Scenario 1 – Residual Fuel Oil Firing

h. The Permittee shall install, operate, and maintain carbon monoxide continuous emissions monitoring system (CO CEMS) at the power boilers (ID Nos. 150-001 and 161-001). The monitor must complete a minimum of

one cycle of operation for each successive 15-minute period. The monitor must record a minimum of four successive cycles of operation to have a valid hour of data. For the purposes of calculating data averages, do not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required QA/QC activities.

i. The 30-day rolling average CO emission rate shall be calculated and recorded on a daily basis.
ii. Each CEMS must be installed, operated, and maintained according to the applicable procedures under Performance Specification (PS) 3 or 4A of 40 CFR 60, Appendix B, and according to the site-specific monitoring plan.

Site-Specific Monitoring Plan for Operating Scenario 1 – Residual Fuel Oil Firing

i. The Permittee must develop a site-specific monitoring plan for each required continuous monitoring system (CMS), including the CO CEMS. The plan shall be submitted to the NC DAQ Stationary Source Compliance Branch (SSCB) at least 60 days before the initial performance evaluation of the CMS. The plan must describe the elements listed below:
   i. The measurement location such that the measurement is representative.
   ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.
   iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations).
   iv. Ongoing operation and maintenance procedures.
   v. Ongoing data quality assurance procedures.
   vi. Ongoing recordkeeping and reporting procedures.

Recordkeeping Requirements

j. If the Permittee limits residual fuel oil firing to less than 10% on an annual average heat input basis, it shall create and retain the following records at least once per calendar month:
   j.1 Record the fuel use by each affected source, including the type(s) of fuel and amount(s) used, during the previous calendar month; and,
   j.2 Calculate the annual average heat input from residual fuel oil for each affected source during the previous 12-month period.

After the initial compliance date, if the annual average heat input is equal to or greater than 10% for any 12-month period, the Permittee shall conduct an initial compliance test within 60 days following the end of the 12-month period (unless such date is *earlier than* 180 days following the initial compliance date, in which case the test shall be performed 180 days following the initial compliance date). Monitoring and recordkeeping requirements associated with residual fuel oil firing shall be implemented as soon as practicable, and in no case later than 60 days following the end of the 12-month period. Until the completion of the initial compliance test, operating parameters for the condensing scrubber shall be based on the best engineering information available to the Permittee. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if it fails to comply with the recordkeeping requirements.

k. Maintain a copy of each notification and report required, including all documentation supporting any Notification of Compliance Status. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if it fails to comply with the recordkeeping requirements.

l. Maintain records of performance tests, fuel analyses, and CMS performance evaluations. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if it fails to comply with the recordkeeping requirements.

m. For each required CMS and CEMS, maintain the following records:
   i. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
   ii. A record of each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
   iii. All CMS calibration checks; and,
   iv. All adjustments and maintenance performed on CMS.

Reporting Requirements

n. Notification of Compliance Status. The Permittee must submit a Notification of Compliance Status that meets the requirements of 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the final required performance test and/or other initial compliance demonstration. The Notification of Compliance Status report must contain the following information, as applicable:

i. A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.
ii. Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance.
iii. A certification signed by the Responsible Official that the facility has met all applicable emission limits and work practice standards.

o. Semiannual Summary Report. The Permittee shall submit a summary report by January 30 of each calendar year for the preceding six-month period between July and December, and by July 30 of each calendar year for the preceding six-month period between January and June. The first summary report shall be required on July 30, 2014. The report shall include the following:

i. Company name and address;
ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
iii. Date of report and beginning and ending dates of the reporting period;
iv. A summary of the results of any required annual performance tests;
v. Signed statement indicating that no new types of fuel were fired in the affected sources.

2.3 STATE ONLY ENFORCEABLE REQUIREMENTS

A. North Carolina Air Toxics

1. 15A NCAC 02D .1100: TOXIC AIR POLLUTANT EMISSIONS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved air toxic compliance demonstration, the following emission limits shall not be exceeded for toxic air pollutants known to be emitted from Weyerhaeuser New Bern Pulp Mill:

Emission Source ID	Description	Compound	Emission Rate	Units
ES 420-029	Washed Stock Chest	Acrolein	1.98E-02	lb/hr
		Benzene	2.42E+00	lb/yr
		Formaldehyde	1.12E-03	lb/hr
		Hexane	2.44E+02	lb/day
		Hydrogen Sulfide	2.66E+01	lb/day
		Methyl Mercaptan	1.55E-02	lb/hr
		Xylene (24-Hour)	1.03E+01	lb/day
		Xylene (1-Hour)	1.59E+00	lb/hr
ES 420-056	BMP Collection Chest	Acrolein	5.15E-04	lb/hr
		Benzene	1.52E-01	lb/yr
		1,3-Butadiene	3.03E+01	lb/yr
		Carbon Disulfide	4.59E+01	lb/day
		Chloroform	3.49E-02	lb/yr
		Formaldehyde	9.93E-05	lb/hr
		Hexane	3.79E-02	lb/day
		Hydrogen Sulfide	4.01E+00	lb/day
		Methyl Mercaptan	2.66E-03	lb/hr
		Methylene Chloride (Annual)	4.33E+01	lb/yr
		Methylene Chloride (1-Hour)	9.82E-03	lb/h
		Xylene (24-Hour)	9.32E-02	lb/day
		Xylene (1-Hour)	1.43E-02	lb/hr
ES 420-274	Oxygen Interstage Pulp Tank	Benzene	2.42E+01	lb/yr
		Cresol	4.65E+01	lb/hr
		Hexane	1.83E+02	lb/day
		Xylene 24-hour	6.94E+01	lb/day
		Xylene 1-hour	1.07E+01	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 420-052	200 Ton Brownstock HD Chest	Benzene	6.68E-01	lb/yr
		Chloroform	2.02E+03	lb/yr
		Hexane	1.69E+01	lb/day
		Methyl Mercaptan	7.15 E-03	lb/hr
		Phenol	3.70E+00	lb/hr
		Xylene (24-Hour)	2.34E+00	lb/day
		Xylene (1-Hour)	3.60E-01	lb/hr
ES 420-202	White Liquor Oxidizer	Benzene	2.42E+01	lb/yr
		Formaldehyde	1.16E-02	lb/hr
		Hexane	7.79E+01	lb/day
		Xylene (24-Hour)	2.12E+01	lb/day
		Xylene (1-Hour)	3.26E+00	lb/hr
ES 440-861	CRP Salt Cake Return Tank	Acrolein	5.15E-03	lb/hr
		Benzene	1.52E+00	lb/yr
		1,3-Butadiene	3.03E+02	lb/yr
		Carbon Disulfide	4.59E+01	lb/day
		Chloroform	3.49E-01	lb/yr
		Formaldehyde	9.93E-04	lb/hr
		Hexane	3.79E-01	lb/day
		Hydrogen Sulfide	4.01E+00	lb/day
		Methyl Mercaptan	2.66E-02	lb/hr
		Methylene Chloride (Annual)	4.33E+02	lb/yr
		Methylene Chloride (1-Hour)	9.82E-02	lb/hr
		Xylene (24-Hour)	9.32E-01	lb/day
		Xylene (1-Hour)	1.43E-01	lb/hr
ES 440-001	No. 1 Weak Black Liquor Stg. Tank	Acrolein	5.15E-03	lb/hr
		Benzene	1.52E+00	lb/yr
		1,3-Butadiene	3.03E+02	lb/yr
		Carbon Disulfide	4.59E+01	lb/day
		Chloroform	3.49E-01	lb/yr
		Formaldehyde	9.93E-04	lb/hr
		Hexane	3.79E-01	lb/day
		Hydrogen Sulfide	4.01E+00	lb/day
		Methyl Mercaptan	2.66E-02	lb/hr
		Methylene Chloride (Annual)	4.33E+02	lb/yr
		Methylene Chloride (1-Hour)	9.82E-02	lb/hr
		Xylene (24-Hour)	9.32E-01	lb/day
		Xylene (1-Hour)	1.43E-01	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 440-004	No. 2 Weak Black Liquor Stg. Tank	Acrolein	5.15E-03	lb/hr
		Benzene	1.52E+00	lb/yr
		1,3-Butadiene	3.03E+02	lb/yr
		Carbon Disulfide	4.59E+01	lb/day
		Chloroform	3.49E-01	lb/yr
		Formaldehyde	9.93E-04	lb/hr
		Hexane	3.79E-01	lb/day
		Hydrogen Sulfide	4.01E+00	lb/day
		Methyl Mercaptan	2.66E-02	lb/hr
		Methylene Chloride (Annual)	4.33E+02	lb/yr
		Methylene Chloride (1-Hour)	9.82E-02	lb/hr
		Xylene (24-Hour)	9.32E-01	lb/day
		Xylene (1-Hour)	1.43E-01	lb/hr
ES 440-016	Soap Skimmer Tank	Acrolein	5.02E-02	lb/hr
		Benzene	3.04E-01	lb/yr
		1,3-Butadiene	6.06E+01	lb/yr
		Carbon Disulfide	9.17E+00	lb/day
		Chloroform	6.98E-02	lb/yr
		Formaldehyde	1.99E-04	lb/hr
		Hexane	7.59E-02	lb/day
		Hydrogen Sulfide	8.01E-01	lb/day
		Methyl Mercaptan	5.32E-03	lb/hr
		Methylene Chloride (Annual)	8.67E+01	lb/yr
		Methylene Chloride (1-Hour)	1.96E-02	lb/hr
		Xylene (24-Hour)	9.09E+00	lb/day
		Xylene (1-Hour)	1.40E+00	lb/hr
ES 440-765	Soap Storage Tank No. 2	Acrolein	1.03E-03	lb/hr
		Benzene	3.04E-01	lb/yr
		1,3-Butadiene	6.06E+01	lb/yr
		Carbon Disulfide	9.17E+00	lb/day
		Chloroform	6.98E-02	lb/yr
		Formaldehyde	1.99E-04	lb/hr
		Hexane	7.59E-02	lb/day
		Hydrogen Sulfide	8.01E-01	lb/day
		Methyl Mercaptan	5.32E-03	lb/hr
		Methylene Chloride (Annual)	8.67E+01	lb/yr
		Methylene Chloride (1-Hour)	1.96E-02	lb/hr
		Xylene (24-Hour)	1.86E-01	lb/day
		Xylene (1-Hour)	2.87E-02	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 440-030	Soap Storage Tank No. 1	Acrolein	1.03E-03	lb/hr
		Benzene	3.04E-01	lb/yr
		1,3-Butadiene	6.06E+01	lb/yr
		Carbon Disulfide	9.17E+00	lb/day
		Chloroform	6.98E-02	lb/yr
		Formaldehyde	1.99E-04	lb/hr
		Hexane	7.59E-02	lb/day
		Hydrogen Sulfide	8.01E-01	lb/day
		Methyl Mercaptan	5.32E-03	lb/hr
		Methylene Chloride (Annual)	8.67E+01	lb/yr
		Methylene Chloride (1-Hour)	1.96E-02	lb/hr
		Xylene (24-Hour)	1.86E-01	lb/day
		Xylene (1-Hour)	2.87E-02	lb/hr
ES 440-027	55% Black Liquor Storage Tank	Acrolein	6.78E-04	lb/hr
		Benzene	3.43E-01	lb/yr
		1,3-Butadiene	2.17E+02	lb/yr
		Carbon Disulfide	9.14E+00	lb/day
		Chloroform	2.28E+01	lb/yr
		Formaldehyde	2.48E-03	lb/hr
		Hexane	3.96E+00	lb/day
		Hydrogen Sulfide	7.28E+01	lb/day
		Methyl Mercaptan	2.04E-01	lb/hr
		Methylene Chloride (Annual)	8.24E+01	lb/yr
		Methylene Chloride (1-Hour)	1.87E-02	lb/hr
		Phenol	5.85E-02	lb/hr
		Xylene (24-Hour)	2.63E-01	lb/day
		Xylene (1-Hour)	4.04E-02	lb/hr
ES 440-865	80% Black Liquor Storage Tank	Hexane	9.98E-01	lb/day
		Methyl Mercaptan	2.03E-01	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 440-032	Evaporator Boilout Tank	Acrolein	5.15E-03	lb/hr
		Benzene	1.52E+00	lb/yr
		1,3-Butadiene	3.03E+02	lb/yr
		Carbon Disulfide	4.59E+01	lb/day
		Chloroform	3.49E-01	lb/yr
		Formaldehyde	9.93E-04	lb/hr
		Hexane	3.79E-01	lb/day
		Hydrogen Sulfide	4.01E+00	lb/day
		Methyl Mercaptan	2.66E-02	lb/hr
		Methylene Chloride (Annual)	4.33E+02	lb/yr
		Methylene Chloride (1-Hour)	9.82E-02	lb/hr
		Xylene (24-Hour)	9.32E-01	lb/day
		Xylene (1-Hour)	1.43E-01	lb/hr
ES 455-400	Green Liquor Stabilization Tank	Benzene	2.44E+00	lb/yr
		Chloroform	1.14E+01	lb/yr
		Hexane	1.50E+00	lb/day
		Methyl Mercaptan	8.93E-05	lb/hr
		Xylene (24-Hour)	5.83E-02	lb/day
		Xylene (1-Hour)	8.97E-03	lb/hr
ES 455-003	No. 1 Green Liquor Clarifier	Benzene	1.46E+01	lb/yr
		Methyl Mercaptan	1.79E-02	lb/hr
		Xylene (24-Hour)	2.69E+01	lb/day
		Xylene (1Hhour)	4.14E+00	lb/hr
ES 455-006	Dregs Washer Tank	Benzene	1.46E+00	lb/yr
		Methyl Mercaptan	1.79E-03	lb/hr
		Xylene (24-Hour)	2.69E+00	lb/day
		Xylene (1-Hour)	4.14E-01	lb/hr
ES 455-015	No. 1 Causticizer	Acrolein	8.77E-03	lb/hr
		Ammonia	8.80E+00	lb/hr
		Benzene	7.33E+00	lb/yr
		Carbon Disulfide	1.50E-01	lb/day
		Chloroform	4.33E-01	lb/yr
		Formaldehyde	5.28E-04	lb/hr
		Hexane	2.87E+01	lb/day
		Methylene Chloride (Annual)	9.74E+01	lb/yr
		Methylene Chloride (1-Hour)	2.21E-02	lb/hr
		Phenol	1.53E-02	lb/hr
		Xylene (24-Hour)	1.91E-01	lb/day
		Xylene (1-Hour)	2.94E-02	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 455-017	No. 2 Causticizer	Acrolein	8.77E-03	lb/hr
		Ammonia	8.80E+00	lb/hr
		Benzene	7.33E+00	lb/yr
		Carbon Disulfide	1.50E-01	lb/day
		Chloroform	4.33E-01	lb/yr
		Formaldehyde	5.28E-04	lb/hr
		Hexane	2.87E+01	lb/day
		Methylene Chloride (Annual)	9.74E+01	lb/yr
		Methylene Chloride (1-Hour)	2.21E-02	lb/hr
		Phenol	1.53E-02	lb/hr
		Xylene (24-Hour)	1.91E-01	lb/day
		Xylene (1-Hour)	2.94E-02	lb/hr
ES 455-019	No. 3 Causticizer	Acrolein	8.77E-03	lb/hr
		Ammonia	8.80E+00	lb/hr
		Benzene	7.33E+00	lb/yr
		Carbon Disulfide	1.50E-01	lb/day
		Chloroform	4.33E-01	lb/yr
		Formaldehyde	5.28E-04	lb/hr
		Hexane	2.87E+01	lb/day
		Methylene Chloride (Annual)	9.74E+01	lb/yr
		Methylene Chloride (1-Hour)	2.21E-02	lb/hr
		Phenol	1.53E-02	lb/hr
		Xylene (24-Hour)	1.91E-01	lb/day
		Xylene (1-Hour)	2.94E-02	lb/hr
ES 455-020	No. 4 Causticizer	Acrolein	8.77E-03	lb/hr
		Ammonia	8.80E+00	lb/hr
		Benzene	7.33E+00	lb/yr
		Carbon Disulfide	1.50E-01	lb/day
		Chloroform	4.33E-01	lb/yr
		Formaldehyde	5.28E-04	lb/hr
		Hexane	2.87E+01	lb/day
		Methylene Chloride (Annual)	9.74E+01	lb/yr
		Methylene Chloride (1-Hour)	2.21E-02	lb/hr
		Phenol	1.53E-02	lb/hr
		Xylene(24-Hour)	1.91E-01	lb/day
		Xylene (1-Hour)	2.94E-02	lb/hr
ES 455-403	No. 2 Green Liquor Clarifier	Benzene	1.46E+01	lb/yr
		Methyl Mercaptan	1.79E-02	lb/hr
		Xylene (24-Hour)	2.69E+01	lb/day
		Xylene (1-Hour)	4.14E+00	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 455-028	No. 2 White Liquor Clarifier	Benzene	1.51E+01	lb/yr
		Formaldehyde	1.49E-01	lb/hr
		Xylene (24-Hour)	8.34E+00	lb/day
		Xylene (1-Hour)	1.28E+00	lb/hr
ES 455-710	White Liquor Storage Tanks	Hydrogen Sulfide	1.37E+01	lb/day
		Methyl Mercaptan	1.81E+00	lb/hr
ES 455-036	Mud Washer/Weak Wash Tank	Benzene	2.44E+00	lb/yr
		Methyl Mercaptan	3.15E-02	lb/hr
		Xylene (24-Hour)	4.04E+00	lb/day
		Xylene (1-Hour)	6.21E-01	lb/hr
ES 455-043	Lime Mud Storage Tank No.1	Benzene	2.44E+00	lb/yr
		Xylene (24-Hour)	9.55E-01	lb/day
		Xylene (1-Hour)	1.47E-01	lb/hr
ES 455-732	Lime Mud Storage Tank No. 2	Benzene	2.44E+00	lb/yr
		Xylene (24-Hour)	9.55E-01	lb/day
		Xylene (1-Hour)	1.47E-01	lb/hr
ES 455-406	Lime Slaker	Ammonia	2.09E+01	lb/hr
		Benzene	3.79E+00	lb/yr
		Carbon Disulfide	9.38E-02	lb/day
		Hexane	1.13E+01	lb/day
		Methylene Chloride (Annual)	1.82E+05	lb/yr
		Methylene Chloride (1-Hour)	4.13E+01	lb/hr
		Phenol	6.86E-01	lb/hr
		Xylene (24-Hour)	1.95E-01	lb/day
		Xylene (1-Hour)	3.00E-02	lb/hr
ES 425-093, ES 425-090, ES 425-305	Bleached Stock HD Chests	Acrolein	2.62E-02	lb/hr
ES 425-117	Nos. 1 & 2 Bleached Deckers	Acrolein	1.48E-01	lb/hr
ES 425-714	No. 3 Bleached Decker	Acrolein	1.48E-01	lb/hr
ES 430-022	Sulfuric Acid Tank	Sulfuric Acid (24-Hour)	2.99E-05	lb/day
		Sulfuric Acid (1-Hour)	3.98E-06	lb/hr
ES 430-026	Sodium Chlorate Dissolving Tank	Chlorine (24-Hour)	1.74E+01	lb/day
		Chlorine (1-Hour)	3.29E+00	lb/hr
ES 430-047	East ClO2 Storage Tank	Chlorine (24-Hour)	9.27E+01	lb/day
		Chlorine (1-Hour)	1.75E+01	lb/hr
ES 430-542	ClO2 Generator System	Chlorine (24-Hour)	1.85E+02	lb/day
		Chlorine (1-Hour)	3.50E+01	lb/hr
ES 430-543	West ClO2 Storage Tank	Chlorine (24-Hour)	9.27E+01	lb/day
		Chlorine (1-Hour)	1.75E+01	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 455-058	Lime Mud Filter Vacuum Pump	Benzene	2.05E+00	lb/yr
		Carbon Disulfide	2.38E+00	lb/day
		Chloroform	2.88E+02	lb/yr
		Hexane	9.11E+01	lb/day
		Methyl Mercaptan	6.38E-03	lb/hr
		Methylene Chloride (Annual)	7.55E+02	lb/yr
		Methylene Chloride (1-Hour)	1.71E-01	lb/hr
		Xylene (24-Hour)	3.34E+00	lb/day
		Xylene 1-Hour)	5.14E-01	lb/hr
ES 455-079	Lime Mud Filter	Acrolein	2.74E-02	lb/hr
		Benzene	1.46E+01	lb/yr
		Formaldehyde	1.42E-02	lb/hr
		Xylene (24-Hour)	3.96E+00	lb/day
		Xylene (1-Hour)	6.09E-01	lb/hr
ES 465-001	Pulp Dryer Operation	Acrolein	3.29E+00	lb/hr
		Benzene	4.81E+02	lb/hr
		Carbon Disulfide	1.90E+02	lb/hr
		Chloroform	3.73E+03	lb/hr
		Formaldehyde	1.17E+00	lb/hr
		Hexane	1.25E+03	lb/hr
		Methyl Mercaptan	1.73E+00	lb/hr
		Methylene Chloride (Annual)	2.27E+05	lb/yr
		Methylene Chloride (1-Hour)	5.14E+01	lb/hr
		Phenol	2.38E+01	lb/hr
		Xylene (24-Hour)	8.58E+01	lb/hr
		Xylene (1-Hour)	1.32E+01	lb/hr
	Pilot Plant Spray Tower	Hydrogen Sulfide	4.22E+02	lb/day
		Methyl Mercaptan	2.28E-02	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 455-410	No. 5 Causticizer	Acrolein	8.77E-03	lb/hr
		Ammonia	8.80E+00	lb/hr
		Benzene	7.33E+00	lb/yr
		Carbon Disulfide	1.50E-01	lb/day
		Chloroform	4.33E-01	lb/yr
		Formaldehyde	5.28E-04	lb/hr
		Hexane	2.87E+01	lb/day
		Methylene Chloride (Annual)	9.74E+01	lb/yr
		Methylene Chloride (1-Hour)	2.21E-02	lb/hr
		Phenol	1.53E-02	lb/hr
		Xylene (24-hour)	1.91E-01	lb/day
		Xylene (1-Hour)	2.94E-02	lb/hr
	In Mill Sewer	Hydrogen Sulfide	1.08E+02	lb/day
ES 401-076	Turpentine Sump	Hydrogen Sulfide	8.23E+00	lb/day
		Methyl Mercaptan	1.88E-02	lb/hr
ES 140-003	No. 1 & 2 Raw Water Clarifiers	Benzene	2.74E+01	lb/yr
		Chloroform	2.21E+02	lb/yr
		Hydrogen Sulfide	2.81E+01	lb/day
		Methylene Chloride (Annual)	1.52E+03	lb/yr
		Methylene Chloride (1-Hour)	3.44E-01	lb/hr
		Phenol	1.60E-05	lb/hr
		Xylene (24-Hour)	6.21E+00	lb/day
		Xylene (1-Hour)	9.56E-01	lb/hr
ES 455-021	Causticizer Sump	Benzene	3.82E-01	lb/yr
		Xylene (24-Hour)	1.28E-02	lb/day
		Xylene (1-Hour)	1.98E-03	lb/hr
ES 185-010	WTS Clarifier F901	Ammonia	4.29E+00	lb/hr
		Carbon Disulfide	9.92E+01	lb/day
		Chloroform	1.14E+04	lb/yr
		Formaldehyde	3.82E-02	lb/hr
		Methylene Chloride (Annual)	2.75E+02	lb/yr
		Methylene Chloride (1-Hour)	6.23E-02	lb/hr
		Phenol	9.95E-02	lb/hr
ES 185-000	WTS Pond R	Ammonia	4.54E-01	lb/hr
		Carbon Disulfide	2.03E-06	lb/day
		Chloroform	1.14E-03	lb/yr
		Formaldehyde	4.00E-05	lb/hr
		Methylene Chloride (Annual)	5.01E-04	lb/yr
		Methylene Chloride (1-Hour)	1.13E-07	lb/hr
		Phenol	3.86E-15	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 185-000	WTS Aerated Flow Channel	Ammonia	1.08E-02	lb/hr
		Carbon Disulfide	2.59E-07	lb/day
		Chloroform	1.06E-04	lb/yr
		Formaldehyde	6.70E-07	lb/hr
		Methylene Chloride (Annual)	4.70E-05	lb/yr
		Methylene Chloride (1-Hour)	1.07E-08	lb/hr
		Phenol	2.82E-18	lb/hr
ES 185-000	WTS Pond B Reactor 1	Ammonia	9.62E-02	lb/hr
		Carbon Disulfide	3.31E-03	lb/day
		Chloroform	7.32E-01	lb/yr
		Formaldehyde	3.27E-04	lb/hr
		Methylene Chloride (Annual)	8.39E-02	lb/yr
		Methylene Chloride (1-Hour)	1.90E-05	lb/hr
		Phenol	8.63E-11	lb/hr
ES 185-000	WTS Pond B Reactor 2	Ammonia	4.62E-02	lb/hr
		Carbon Disulfide	9.54E-05	lb/day
		Chloroform	2.41E-02	lb/yr
		Formaldehyde	3.17E-05	lb/hr
		Methylene Chloride (Annual)	4.75E-03	lb/yr
		Methylene Chloride (1-Hour)	1.08E-06	lb/hr
		Phenol	1.41E-13	lb/hr
ES 185-000	WTS Riffler	Ammonia	6.38E-04	lb/hr
		Carbon Disulfide	1.22E-05	lb/day
		Chloroform	3.92E-03	lb/yr
		Formaldehyde	4.29E-07	lb/hr
		Methylene Chloride (Annual)	8.56E-04	lb/yr
		Methylene Chloride (1-Hour)	1.94E-07	lb/hr
		Phenol	1.85E-15	lb/hr
ES 185-000	WTS Pond A Reactor 1	Ammonia	9.48E-04	lb/hr
		Carbon Disulfide	1.22E+02	lb/day
		Chloroform	1.43E+04	lb/yr
		Formaldehyde	5.67E-02	lb/hr
		Methylene Chloride (Annual)	3.06E+02	lb/yr
		Methylene Chloride (1-Hour)	6.94E-02	lb/hr
		Phenol	1.25E-03	lb/hr

Emission Source ID	Description	Compound	Emission Rate	Units
ES 185-000	WTS Pond A Reactor 2	Ammonia	1.06E-03	lb/hr
		Carbon Disulfide	4.59E+00	lb/day
		Chloroform	6.75E+02	lb/yr
		Formaldehyde	9.22E-03	lb/hr
		Methylene Chloride (Annual)	2.40E+01	lb/yr
		Methylene Chloride (1-Hour)	5.44E-03	lb/hr
		Phenol	4.44E-06	lb/hr
ES 185-000	WTS Pond A Reactor 3	Ammonia	1.46E-03	lb/hr
		Carbon Disulfide	1.35E-01	lb/day
		Chloroform	2.46E+01	lb/yr
		Formaldehyde	1.77E-03	lb/hr
		Methylene Chloride (Annual)	1.49E+00	lb/yr
		Methylene Chloride (1-Hour)	3.37E-04	lb/hr
		Phenol	1.92E-08	lb/hr
ES 185-000	WTS Mix Channel	Ammonia	3.73E-07	lb/hr
		Carbon Disulfide	7.67E-01	lb/day
		Chloroform	1.10E+02	lb/yr
		Formaldehyde	7.79E-05	lb/hr
		Methylene Chloride (Annual)	1.98E+00	lb/yr
		Methylene Chloride (1-Hour)	4.49E-04	lb/hr
		Phenol	1.66E-04	lb/hr
ES 445-132	Black Liquor Dump Tank	Acetaldehyde	1.12E-02	lb/hr
		Acrolein	5.15E-03	lb/hr
		Benzene	1.52E-01	lb/yr
		1,3-Butadiene	3.03E+01	lb/yr
		Carbon Disulfide	4.59E+01	lb/day
		Chloroform	9.56E-05	lb/day
		Formaldehyde	9.93E-05	lb/hr
		Hexane	3.79E-02	lb/day
		Hydrogen Sulfide	4.01E-01	lb/day
		Methyl Mercaptan	2.66E-03	lb/hr
		Methylene Chloride (Annual)	4.33E+01	lb/yr
		Methylene Chloride (1-Hour)	9.82E-03	lb/hr
		Xylene (24-Hour)	9.32E-02	lb/day
		Xylene (1-Hour)	1.43E-02	lb/hr
ES 455-422	Lime Mud Mix Tank	Benzene	2.44E+00	lb/yr
		Xylene (24-Hour)	9.55E-01	lb/day
		Xylene (1-Hour)	1.47E-01	lb/hr
ES 455-711	White Liquor Standpipe	Hydrogen Sulfide	1.37E+00	lb/day
		Methyl Mercaptan	1.81E-01	lb/hr

Pursuant to 15A NCAC 02D .1100 and in accordance with the approved air toxic compliance demonstration, the following facility-wide emission limits shall not be exceeded for toxic air pollutants not known to be emitted from Weyerhaeuser New Bern Pulp Mill:

Toxic Air Pollutant	Averaging Period	Facility-wide Emission Rate, (lb/averaging period)
1,1,1,2-Tetrachloro-2,2-Difluoroethane	24-Hour	531,984.44
1,1,2,2-Tetrachloro-1,2-Difluoroethane	24-Hour	531,984.44
1,1,2,2-Tetrachloroethane	Annual	228,734.83
1,4-Dioxane	24-Hour	5,729.56
2,4-Toluene Diisocyanate	24-Hour	1.90
2,6-Toluene Diisocyanate	24-Hour	1.90
Acetic Acid	1-Hour	233.33
Acrylonitrile	Annual	5,561.94
Alkyl Mercury	24-Hour	0.61
Aniline	1-Hour	63.02
Aziridine	24-Hour	60.95
Benzidine	Annual	54.49
Benzyl Chloride	1-Hour	31.51
Beryllium Chloride	Annual	148.78
Beryllium Fluoride	Annual	148.78
Beryllium Nitrate	Annual	148.78
Bis-Chloromethyl Ether	Annual	13.21
Bromine	1-Hour	12.62
Cadmium Acetate	Annual	199.53
Cadmium Bromide	Annual	199.53
Chloroprene	1-Hour	220.72
Chloroprene	24 hour	4,500.98
Chromate (soluble) Compounds	24 hour	5.71
Chromate Pigments	Annual	2.99
Dichlorodifluoromethane	24 hour	2,537,155.69
Dichlorofluoromethane	24 hour	5,114.32
Dimethyl Sulfate	24 hour	30.48
Epichlorohydrin	Annual	3,015,267.40
Ethyl Acetate	1-Hour	8,827.44
Ethyl Mercaptan	1-Hour	6.27
Ethylene Dichloride	Annual	14,600.10
Ethylene Glycol Monoethyl Ether	1-Hour	119.76
Ethylene Glycol Monoethyl Ether	24 hour	1,228.58
Ethylene Oxide	Annual	695.24
Ethylenediamine	1-Hour	157.62
Ethylenediamine	24 hour	3,068.59
Fluorides	1-Hour	15.79
Fluorides	24 hour	163.81

Toxic Air Pollutant	Averaging Period	Facility-wide Emission Rate, (lb/averaging period)
Hexachlorodibenzo-p-dioxin	Annual	2.78
Hexane Isomers	1-Hour	22,699.12
Hydrazine	24 hour	5.71
Hydrogen Cyanide	1-Hour	69.37
Hydrogen Cyanide	24 hour	1,432.39
Maleic Anhydride	1-Hour	6.27
Maleic Anhydride	24 hour	121.91
Manganese Cyclopentadienyl Tricarbonyl	24 hour	5.71
Manganese Tetroxide	24 hour	62.86
Mercury Vapor	24 hour	5.71
Nickel (soluble)	24 hour	5.71
Nickel Carbonyl	24 hour	5.71
Nickel Subsulfide	Annual	76.48
Nitric Acid	1-Hour	63.02
Nitrobenzene	1-Hour	31.51
Nitrobenzene	24 hour	613.34
n-Nitrosodimethylamine	Annual	2,085.73
p-Dichlorobenzene	1-Hour	4,161.54
Phosgene	24 hour	24.76
Phosphine	1-Hour	8.17
Polychlorinated Biphenyls	Annual	2,780.97
Vinylidene Chloride	24 hour	1,228.58

2. 15A NCAC 02D .1100: TOXIC AIR POLLUTANT EMISSIONS – AVOIDANCE CONDITION

To avoid the requirements of 02D .1100, the Permittee may use a blend of on-specification used No. 4 fuel oil and unadulterated No. 6 fuel oil for all boilers and the lime kiln. The on-specification No. 4 fuel oil must be supplied by a DAQ-approved vendor as follows.

a. Specifications - The on-specification used No. 4 fuel oil shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

Constituent/Property	Allowable Level
Arsenic	1 ppm maximum
Cadmium	2 ppm maximum
Chromium	5 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	130EF minimum
Sulfur	2.0 % maximum (by weight)
Ash	1.0 % maximum

The Permittee is responsible for ensuring that the on-specification used No. 4 fuel oil meets the approved criteria

for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by DAQ as a result of any sampling and analysis of the fuel oil.

b. Testing Requirement - The Permittee shall analyze the No. 4/No. 6 fuel oil blend for percent sulfur content and Btu heat rate per gallon on a quarterly basis. The Permittee shall analyze the No. 4 fuel oil for the Constituents listed in the table above annually.

c. Recordkeeping Requirements - The Permittee shall maintain at the facility for a minimum of three years, and shall make available to representatives of the DAQ upon request, accurate records of the following:
   i. the actual amount of on-specification used No. 4 fuel oil delivered to, and combusted at the facility on an annual basis.
   ii. the results of any analytical testing of the on-specification used No. 4 fuel oil or the oil blend as it is sampled and tested by the Permittee or vendor.

d. Reporting Requirements - Within 30 days after each calendar year, the Permittee shall submit in writing to the Regional Supervisor, DAQ, the following:
   i. a summary of the results of the quarterly analytical testing of the No.4/No. 6 fuel oil blend for the previous 12 months.
   ii. a summary of the results of the annual analytical testing of the constituents in the No. 4 fuel oil.
   iii. the total gallons of on-specification used No. 4 fuel oil from each approved vendor combusted at the facility for the previous 12 months.

e. The DAQ reserves the right to require additional testing and/or monitoring of the on-specification used No. 4 fuel oil without notice.

2.4 - Schedule of Compliance

The **Recovery Furnace (ID No. ES-455-001)** is subject to the compliance schedule described below. This compliance schedule is an enforceable sequence of actions with milestones leading to compliance with applicable requirements for which the source is in noncompliance at the time of permit issuance. Any judicial consent decree or an administrative order to which the source is subject shall be supplemental to and shall not sanction noncompliance with the applicable requirements on which it is based [15A NCAC 02Q .0508(m)].

A. **Actions to be Taken by the Permittee** - The Permittee, desiring to comply with the legal requirements of this permit and with all pertinent provisions of the law and applicable requirements, is subject to the following activities:

1. On or before September 1, 2011, the Permittee shall submit a Prevention of Significant Deterioration (PSD) permit application for the applicable changes make pursuant to the 2009 Recovery Furnace Upgrade Project.

B. **Termination** – This Order shall terminate upon the issuance of PSD permit for the subject modification.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
   The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
   The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
   The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
   The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
   Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.

d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]
   The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
   To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
   a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
      i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
         - name and location of the facility;
         - nature and cause of the malfunction or breakdown;
         - time when the malfunction or breakdown is first observed;
         - expected duration; and
         - estimated rate of emissions;
      ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
      iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
   a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the

DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
    c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]
The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY
As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
   a. a description of the change at the facility;
   b. the date on which the change will occur;
   c. any change in emissions; and
   d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound